WA 2917
2/16/89
~~#2~~ 6b

16 February 1989

RCRA PERMIT
ADMINISTRATIVE RECORD
ITEM NUMBER
TOTAL NUMBER OF PAGES

ANALYTICAL RESOURCES INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

FILE COPY

RECEIVED

Jim Bailey
Sweet Edwards
18912 North Creek Parkway
Suite 210
Bothell, WA 98011

RE: ARI Project No. 02444,02413

Dear Jim:

Please find enclosed the copies of the data you did not recieve for ARI job Nos. 02444 & 02431.

If you need information or have any questions, please call me any time.

Sincerely,

ANALYTICAL RESOURCES, INC.

Susan Rosa
EPA Project Manager

SDR/cd

enclosures

cc: file#02444,02413

RECEIVED
MAR 22 1989
WASTE MANAGEMENT BRANCH

USEPA RCRA
3012589

ANALYTICAL RESOURCES INCORPORATED

Analytical Chemists & Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: CP-108A-0-5

Lab Sample ID: 2444AD
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Date Release Authorized: Brian N. Sebee
Report revised 03/21/89 MAC:B

Amount extracted: 30.5 gm (Dry Weight)
Percent Moisture: 5.2%
pH: 6.6
Conc/Dilution: 1 to 1 (After GPC)

Date extracted: 01/04/89
Analyzed (FINN 2): 01/13/89
GPC Clean-up: YES (1 of 2)

CAS Number		µg/Kg
108-95-2	Phenol	66 U
111-44-4	bis(2-Chloroethyl)Ether	66 U
95-57-8	2-Chlorophenol	66 U
541-73-1	1,3-Dichlorobenzene	66 U
106-46-7	1,4-Dichlorobenzene	66 U
100-51-6	Benzyl Alcohol	330 U
95-50-1	1,2-Dichlorobenzene	66 U
95-48-7	2-Methylphenol	66 U
39638-32-9	bis(2-chloroisopropyl)Ether	66 U
106-44-5	4-Methylphenol	66 U
621-64-7	N-Nitroso-Di-n-Propylamine	66 U
67-72-1	Hexachloroethane	130 U
98-95-3	Nitrobenzene	66 U
78-59-1	Isophorone	66 U
88-75-5	2-Nitrophenol	330 U
105-67-9	2,4-Dimethylphenol	130 U
65-85-0	Benzoic Acid	660 U
111-91-1	bis(2-Chloroethoxy)Methane	66 U
120-83-2	2,4-Dichlorophenol	200 U
120-82-1	1,2,4-Trichlorobenzene	66 U
91-20-3	Naphthalene	66 U
106-47-8	4-Chloroaniline	200 U
87-68-3	Hexachlorobutadiene	130 U
59-50-7	4-Chloro-3-Methylphenol	130 U
91-57-6	2-Methylnaphthalene	66 U
77-47-4	Hexachlorocyclopentadiene	330 U
88-06-2	2,4,6-Trichlorophenol	330 U
95-95-4	2,4,5-Trichlorophenol	330 U
91-58-7	2-Chloronaphthalene	66 U
88-74-4	2-Nitroaniline	330 U
131-11-3	Dimethyl Phthalate	66 U
208-96-8	Acenaphthylene	66 U
99-09-2	3-Nitroaniline	330 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	66 U
51-28-5	2,4-Dinitrophenol	660 U
100-02-7	4-Nitrophenol	330 U
132-64-9	Dibenzofuran	66 U
121-14-2	2,4-Dinitrotoluene	330 U
606-20-2	2,6-Dinitrotoluene	330 U
84-66-2	Diethylphthalate	66 U
7005-72-3	4-Chlorophenyl-phenylether	66 U
86-73-7	Fluorene	66 U
100-01-6	4-Nitroaniline	330 U
534-52-1	4,6-Dinitro-2-Methylphenol	660 U
86-30-6	N-Nitrosodiphenylamine(1)	66 U
101-55-3	4-Bromophenyl-phenylether	66 U
118-74-1	Hexachlorobenzene	66 U
87-86-5	Pentachlorophenol	330 U
85-01-8	Phenanthrene	66 U
120-12-7	Anthracene	66 U
84-74-2	Di-n-Butylphthalate	66 U
206-44-0	**Fluoranthene**	**160 M**
129-00-0	**Pyrene**	**400**
85-68-7	Butylbenzylphthalate	66 U
91-94-1	3,3'-Dichlorobenzidine	330 U
56-55-3	Benzo(a)Anthracene	66 U
117-81-7	bis(2-Ethylhexyl)Phthalate	65.6 U
218-01-9	**Chrysene**	**290**
117-84-0	Di-n-Octyl Phthalate	66 U
205-99-2	**Benzo(b)Fluoranthene &**	
207-08-9	**Benzo(k)Fluoranthene**	**66 M**
50-32-8	**Benzo(a)Pyrene**	**39 J**
193-39-5	Indeno(1,2,3-cd)Pyrene	66 U
53-70-3	Dibenz(a,h)Anthracene	66 U
191-24-2	Benzo(ghi)Perylene	66 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	54.6%
2-Fluorobiphenyl	98.2%
d14-p-Terphenyl	103%

***Acid surrogate recoveries**

d5-Phenol	84.5%
2-Fluorophenol	77.6%
2,4,6-Tribromophenol	67.1%

ANALYTICAL RESOURCES INCORPORATED

Analytical Chemists & Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: CP-108A-6-10

Lab Sample ID: 2444EG
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Date Release Authorized: Brian N. Zeber
Report revised 03/21/89 MAC:B

Amount extracted: 24.7 gm (Dry Weight)
Percent Moisture: 5.2%
pH: 6.6
Conc/Dilution: 1 to 1 (After GPC)

Date extracted: 01/04/89
Analyzed (FINN 2): 01/13/89
GPC Clean-up: YES (1 of 2)

CAS Number		µg/Kg
108-95-2	Phenol	81 U
111-44-4	bis(2-Chloroethyl)Ether	81 U
95-57-8	2-Chlorophenol	81 U
541-73-1	1,3-Dichlorobenzene	81 U
106-46-7	1,4-Dichlorobenzene	81 U
100-51-6	Benzyl Alcohol	410 U
95-50-1	1,2-Dichlorobenzene	81 U
95-48-7	2-Methylphenol	81 U
39638-32-9	bis(2-chloroisopropyl)Ether	81 U
106-44-5	4-Methylphenol	81 U
621-64-7	N-Nitroso-Di-n-Propylamine	81 U
67-72-1	Hexachloroethane	160 U
98-95-3	Nitrobenzene	81 U
78-59-1	Isophorone	81 U
88-75-5	2-Nitrophenol	410 U
105-67-9	2,4-Dimethylphenol	160 U
65-85-0	Benzoic Acid	810 U
111-91-1	bis(2-Chloroethoxy)Methane	81 U
120-83-2	2,4-Dichlorophenol	240 U
120-82-1	1,2,4-Trichlorobenzene	81 U
91-20-3	Naphthalene	81 U
106-47-8	4-Chloroaniline	240 U
87-68-3	Hexachlorobutadiene	160 U
59-50-7	4-Chloro-3-Methylphenol	160 U
91-57-6	2-Methylnaphthalene	81 U
77-47-4	Hexachlorocyclopentadiene	410 U
88-06-2	2,4,6-Trichlorophenol	410 U
95-95-4	2,4,5-Trichlorophenol	410 U
91-58-7	2-Chloronaphthalene	81 U
88-74-4	2-Nitroaniline	410 U
131-11-3	Dimethyl Phthalate	81 U
208-96-8	Acenaphthylene	81 U
99-09-2	3-Nitroaniline	410 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	81 U
51-28-5	2,4-Dinitrophenol	810 U
100-02-7	4-Nitrophenol	410 U
132-64-9	Dibenzofuran	81 U
121-14-2	2,4-Dinitrotoluene	410 U
606-20-2	2,6-Dinitrotoluene	410 U
84-66-2	Diethylphthalate	81 U
7005-72-3	4-Chlorophenyl-phenylether	81 U
86-73-7	Fluorene	81 U
100-01-6	4-Nitroaniline	410 U
534-52-1	4,6-Dinitro-2-Methylphenol	810 U
86-30-6	N-Nitrosodiphenylamine(1)	81 U
101-55-3	4-Bromophenyl-phenylether	81 U
118-74-1	Hexachlorobenzene	81 U
87-86-5	Pentachlorophenol	410 U
85-01-8	Phenanthrene	81 U
120-12-7	Anthracene	81 U
84-74-2	Di-n-Butylphthalate	81 U
206-44-0	**Fluoranthene**	**200 M**
129-00-0	**Pyrene**	**490**
85-68-7	Butylbenzylphthalate	81 U
91-94-1	3,3'-Dichlorobenzidine	410 U
56-55-3	Benzo(a)Anthracene	81 U
117-81-7	bis(2-Ethylhexyl)Phthalate	81 U
218-01-9	**Chrysene**	**360**
117-84-0	Di-n-Octyl Phthalate	81 U
205-99-2	**Benzo(b)Fluoranthene &**	
207-08-9	**Benzo(k)Fluoranthene**	**82 M**
50-32-8	**Benzo(a)Pyrene**	**48 J**
193-39-5	Indeno(1,2,3-cd)Pyrene	81 U
53-70-3	Dibenz(a,h)Anthracene	81 U
191-24-2	Benzo(ghi)Perylene	81 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	54.6%
2-Fluorobiphenyl	98.2%
d14-p-Terphenyl	103%

***Acid surrogate recoveries**

d5-Phenol	84.5%
2-Fluorophenol	77.6%
2,4,6-Tribromophenol	67.1%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: CP-108A-2.5

Lab Sample ID: 2444H
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Date Release Authorized: Brian N. Gebes
Report revised 03/21/89 MAC:B

Amount extracted: 32.0 gm (Dry Weight)
Percent Moisture: 3.1%
pH: 6.3
Conc/Dilution: 1 to 1 (After GPC)

Date extracted: 01/04/89
Analyzed (FINN 2): 01/13/89
GPC Clean-up: YES (1 of 2)

CAS Number		µg/Kg
108-95-2	Phenol	63 U
111-44-4	bis(2-Chloroethyl)Ether	63 U
95-57-8	2-Chlorophenol	63 U
541-73-1	1,3-Dichlorobenzene	63 U
106-46-7	1,4-Dichlorobenzene	63 U
100-51-6	Benzyl Alcohol	310 U
95-50-1	1,2-Dichlorobenzene	63 U
95-48-7	2-Methylphenol	63 U
39638-32-9	bis(2-chloroisopropyl)Ether	63 U
106-44-5	4-Methylphenol	63 U
621-64-7	N-Nitroso-Di-n-Propylamine	63 U
67-72-1	Hexachloroethane	130 U
98-95-3	Nitrobenzene	63 U
78-59-1	Isophorone	63 U
88-75-5	2-Nitrophenol	310 U
105-67-9	2,4-Dimethylphenol	130 U
65-85-0	Benzoic Acid	630 U
111-91-1	bis(2-Chloroethoxy)Methane	63 U
120-83-2	2,4-Dichlorophenol	190 U
120-82-1	1,2,4-Trichlorobenzene	63 U
91-20-3	Naphthalene	63 U
106-47-8	4-Chloroaniline	190 U
87-68-3	Hexachlorobutadiene	130 U
59-50-7	4-Chloro-3-Methylphenol	130 U
91-57-6	2-Methylnaphthalene	63 U
77-47-4	Hexachlorocyclopentadiene	310 U
88-06-2	2,4,6-Trichlorophenol	310 U
95-95-4	2,4,5-Trichlorophenol	310 U
91-58-7	2-Chloronaphthalene	63 U
88-74-4	2-Nitroaniline	310 U
131-11-3	Dimethyl Phthalate	63 U
208-96-8	Acenaphthylene	63 U
99-09-2	3-Nitroaniline	310 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	63 U
51-28-5	2,4-Dinitrophenol	630 U
100-02-7	4-Nitrophenol	310 U
132-64-9	Dibenzofuran	63 U
121-14-2	2,4-Dinitrotoluene	310 U
606-20-2	2,6-Dinitrotoluene	310 U
84-66-2	Diethylphthalate	63 U
7005-72-3	4-Chlorophenyl-phenylether	63 U
86-73-7	Fluorene	63 U
100-01-6	4-Nitroaniline	310 U
534-52-1	4,6-Dinitro-2-Methylphenol	630 U
86-30-6	N-Nitrosodiphenylamine(1)	63 U
101-55-3	4-Bromophenyl-phenylether	63 U
118-74-1	Hexachlorobenzene	63 U
87-86-5	Pentachlorophenol	310 U
85-01-8	Phenanthrene	63 U
120-12-7	Anthracene	63 U
84-74-2	Di-n-Butylphthalate	63 U
206-44-0	Fluoranthene	63 U
129-00-0	Pyrene	63 U
85-68-7	Butylbenzylphthalate	63 U
91-94-1	3,3'-Dichlorobenzidine	310 U
56-55-3	Benzo(a)Anthracene	63 U
117-81-7	bis(2-Ethylhexyl)Phthalate	63 U
218-01-9	Chrysene	63 U
117-84-0	Di-n-Octyl Phthalate	63 U
205-99-2	Benzo(b)Fluoranthene	63 U
207-08-9	Benzo(k)Fluoranthene	63 U
50-32-8	Benzo(a)Pyrene	63 U
193-39-5	Indeno(1,2,3-cd)Pyrene	63 U
53-70-3	Dibenz(a,h)Anthracene	63 U
191-24-2	Benzo(ghi)Perylene	63 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	53.0%
2-Fluorobiphenyl	76.5%
d14-p-Terphenyl	83.4%

***Acid surrogate recoveries**

d5-Phenol	58.6%
2-Fluorophenol	68.6%
2,4,6-Tribromophenol	79.7%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: CP-108A-15

Lab Sample ID: 24441
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Date Release Authorized: Brian V. Asher
Report revised 03/21/89 MAC:B

Amount extracted: 24.0 gm (Dry Weight)
Percent Moisture: 18.4%
pH: 6.2
Conc/Dilution: 1 to 1 (After GPC)

Date extracted: 01/04/89
Analyzed (FINN 2): 01/13/89
GPC Clean-up: YES (1 of 2)

CAS Number		µg/Kg
108-95-2	Phenol	83 U
111-44-4	bis(2-Chloroethyl)Ether	83 U
95-57-8	2-Chlorophenol	83 U
541-73-1	1,3-Dichlorobenzene	83 U
106-46-7	1,4-Dichlorobenzene	83 U
100-51-6	Benzyl Alcohol	420 U
95-50-1	1,2-Dichlorobenzene	83 U
95-48-7	2-Methylphenol	83 U
39638-32-9	bis(2-chloroisopropyl)Ether	83 U
106-44-5	4-Methylphenol	83 U
621-64-7	N-Nitroso-Di-n-Propylamine	83 U
67-72-1	Hexachloroethane	170 U
98-95-3	Nitrobenzene	83 U
78-59-1	Isophorone	83 U
88-75-5	2-Nitrophenol	420 U
105-67-9	2,4-Dimethylphenol	170 U
65-85-0	Benzoic Acid	830 U
111-91-1	bis(2-Chloroethoxy)Methane	83 U
120-83-2	2,4-Dichlorophenol	250 U
120-82-1	1,2,4-Trichlorobenzene	83 U
91-20-3	Naphthalene	83 U
106-47-8	4-Chloroaniline	250 U
87-68-3	Hexachlorobutadiene	170 U
59-50-7	4-Chloro-3-Methylphenol	170 U
91-57-6	2-Methylnaphthalene	83 U
77-47-4	Hexachlorocyclopentadiene	420 U
88-06-2	2,4,6-Trichlorophenol	420 U
95-95-4	2,4,5-Trichlorophenol	420 U
91-58-7	2-Chloronaphthalene	83 U
88-74-4	2-Nitroaniline	420 U
131-11-3	Dimethyl Phthalate	83 U
208-96-8	Acenaphthylene	83 U
99-09-2	3-Nitroaniline	420 U

CAS Number		µg/Kg
83-32-9	**Acenaphthene**	**100**
51-28-5	2,4-Dinitrophenol	830 U
100-02-7	4-Nitrophenol	420 U
132-64-9	**Dibenzofuran**	**44 M**
121-14-2	2,4-Dinitrotoluene	420 U
606-20-2	2,6-Dinitrotoluene	420 U
84-66-2	Diethylphthalate	83 U
7005-72-3	4-Chlorophenyl-phenylether	83 U
86-73-7	**Fluorene**	**77 J**
100-01-6	4-Nitroaniline	420 U
534-52-1	4,6-Dinitro-2-Methylphenol	830 U
86-30-6	N-Nitrosodiphenylamine(1)	83 U
101-55-3	4-Bromophenyl-phenylether	83 U
118-74-1	Hexachlorobenzene	83 U
87-86-5	Pentachlorophenol	420 U
85-01-8	**Phenanthrene**	**273**
120-12-7	**Anthracene**	**67 J**
84-74-2	Di-n-Butylphthalate	83 U
206-44-0	**Fluoranthene**	**360**
129-00-0	**Pyrene**	**260**
85-68-7	Butylbenzylphthalate	83 U
91-94-1	3,3'-Dichlorobenzidine	420 U
56-55-3	**Benzo(a)Anthracene**	**84**
117-81-7	bis(2-Ethylhexyl)Phthalate	83 U
218-01-9	**Chrysene**	**100**
117-84-0	Di-n-Octyl Phthalate	83 U
205-99-2	Benzo(b)Fluoranthene	83 U
207-08-9	Benzo(k)Fluoranthene	83 U
50-32-8	Benzo(a)Pyrene	83 U
193-39-5	Indeno(1,2,3-cd)Pyrene	83 U
53-70-3	Dibenz(a,h)Anthracene	83 U
191-24-2	Benzo(ghi)Perylene	83 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	46.4%
2-Fluorobiphenyl	86.2%
d14-p-Terphenyl	78.5%

***Acid surrogate recoveries**

d5-Phenol	68.6%
2-Fluorophenol	87.3%
2,4,6-Tribromophenol	77.0%

ANALYTICAL RESOURCES INCORPORATED

Analytical Chemists & Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: CP-108A-20

Lab Sample ID: 2444J
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Date Release Authorized: Brian N. Sieber
Report revised 03/21/89 MAC:B

Amount extracted: 26.7 gm (Dry Weight)
Percent Moisture: 18.9%
pH: 7.5
Conc/Dilution: 1 to 1 (After GPC)

Date extracted: 01/04/89
Analyzed (FINN 2): 01/14/89
GPC Clean-up: YES (1 of 2)

CAS Number		µg/Kg
108-95-2	Phenol	75 U
111-44-4	bis(2-Chloroethyl)Ether	75 U
95-57-8	2-Chlorophenol	75 U
541-73-1	1,3-Dichlorobenzene	75 U
106-46-7	1,4-Dichlorobenzene	75 U
100-51-6	Benzyl Alcohol	370 U
95-50-1	1,2-Dichlorobenzene	75 U
95-48-7	2-Methylphenol	75 U
39638-32-9	bis(2-chloroisopropyl)Ether	75 U
106-44-5	4-Methylphenol	75 U
621-64-7	N-Nitroso-Di-n-Propylamine	75 U
67-72-1	Hexachloroethane	150 U
98-95-3	Nitrobenzene	75 U
78-59-1	Isophorone	75 U
88-75-5	2-Nitrophenol	370 U
105-67-9	2,4-Dimethylphenol	150 U
65-85-0	Benzoic Acid	750 U
111-91-1	bis(2-Chloroethoxy)Methane	75 U
120-83-2	2,4-Dichlorophenol	220 U
120-82-1	1,2,4-Trichlorobenzene	75 U
91-20-3	Naphthalene	75 U
106-47-8	4-Chloroaniline	220 U
87-68-3	Hexachlorobutadiene	150 U
59-50-7	4-Chloro-3-Methylphenol	150 U
91-57-6	2-Methylnaphthalene	75 U
77-47-4	Hexachlorocyclopentadiene	370 U
88-06-2	2,4,6-Trichlorophenol	370 U
95-95-4	2,4,5-Trichlorophenol	370 U
91-58-7	2-Chloronaphthalene	75 U
88-74-4	2-Nitroaniline	370 U
131-11-3	Dimethyl Phthalate	75 U
208-96-8	Acenaphthylene	75 U
99-09-2	3-Nitroaniline	370 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	75 U
51-28-5	2,4-Dinitrophenol	750 U
100-02-7	4-Nitrophenol	370 U
132-64-9	Dibenzofuran	75 U
121-14-2	2,4-Dinitrotoluene	370 U
606-20-2	2,6-Dinitrotoluene	370 U
84-66-2	Diethylphthalate	75 U
7005-72-3	4-Chlorophenyl-phenylether	75 U
86-73-7	Fluorene	75 U
100-01-6	4-Nitroaniline	370 U
534-52-1	4,6-Dinitro-2-Methylphenol	750 U
86-30-6	N-Nitrosodiphenylamine(1)	75 U
101-55-3	4-Bromophenyl-phenylether	75 U
118-74-1	Hexachlorobenzene	75 U
87-86-5	Pentachlorophenol	370 U
85-01-8	Phenanthrene	75 U
120-12-7	Anthracene	75 U
84-74-2	Di-n-Butylphthalate	75 U
206-44-0	Fluoranthene	75 U
129-00-0	Pyrene	75 U
85-68-7	Butylbenzylphthalate	75 U
91-94-1	3,3'-Dichlorobenzidine	370 U
56-55-3	Benzo(a)Anthracene	75 U
117-81-7	bis(2-Ethylhexyl)Phthalate	75 U
218-01-9	Chrysene	75 U
117-84-0	Di-n-Octyl Phthalate	75 U
205-99-2	Benzo(b)Fluoranthene	75 U
207-08-9	Benzo(k)Fluoranthene	75 U
50-32-8	Benzo(a)Pyrene	75 U
193-39-5	Indeno(1,2,3-cd)Pyrene	75 U
53-70-3	Dibenz(a,h)Anthracene	75 U
191-24-2	Benzo(ghi)Perylene	75 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	102%
2-Fluorobiphenyl	91.3%
d14-p-Terphenyl	100%

***Acid surrogate recoveries**

d5-Phenol	78.6%
2-Fluorophenol	91.0%
2,4,6-Tribromophenol	82.8%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

ARI Job No: 2444

Client: Sweet Edwards
Project: S940702

Sample No: CP-108A-20

COMPOUND	SPIKE ADDED (µg/Kg)	SAMPLE CONCENTRATION (µg/Kg)	MS CONCENTRATION (µg/Kg)	MS % REC	QC LIMITS REC
henol	16000	0.0	14000	87.5	26-90
-Chlorophenol	16000	0.0	14900	93.1	25-102
,4-Dichlorobenzene	8000	0.0	7940	99.3	28-104
-Nitroso-Di-n-Propylamine	8000	0.0	7900	98.8	41-126
,2,4-Trichlorobenzene	8000	0.0	10480	*131	38-107
-Chloro-3-Methylphenol	16000	0.0	20200	*126	26-103
cenaphthene	8000	0.0	6500	81.3	31-137
-Nitrophenol	16000	0.0	15200	95.0	11-114
,4-Dinitrotoluene	8000	0.0	8870	*111	28-89
entachlorophenol	16000	0.0	13300	83.1	17-109
yrene	8000	0.0	6590	82.4	35-142

COMPOUND	SPIKE ADDED (µg/Kg)	MSD CONCENTRATION (µg/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC
henol	16000	13500	84.4	3.6	35	26-90
-Chlorophenol	16000	14600	91.3	2.0	50	25-102
,4-Dichlorobenzene	8000	7570	94.6	4.8	27	28-104
-Nitroso-Di-n-Propylamine	8000	7350	91.9	7.2	38	41-126
,2,4-Trichlorobenzene	8000	10180	*127	2.9	23	38-107
-Chloro-3-Methylphenol	16000	20300	*127	-0.5	33	26-103
cenaphthene	8000	6320	79.0	2.8	19	31-137
-Nitrophenol	16000	14900	93.1	2.0	50	11-114
,4-Dinitrotoluene	8000	8680	*109	2.2	47	28-89
entachlorophenol	16000	17900	*112	-29	47	17-109
yrene	8000	6740	84.3	-2.3	36	35-142

RPD: 0 out of 11 outside limits
Spike Recovery: 7 out of 22 outside limits

Asterisked values outside QC Limits

Comments: 25.24 gram dry weight sample size.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: **CP-108A-20**
Matrix Spike

Lab Sample ID: 2444JMS
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Date Release Authorized: Brian N. Bebee
Report revised 03/21/89 MAC:B

Amount extracted: 25.8 gm (Dry Weight)
Percent Moisture: 18.9%
pH: 7.5
Conc/Dilution: 1 to 1 (After GPC)

Date extracted: 01/04/89
Analyzed (FINN 2): 01/14/89
GPC Clean-up: YES (1 of 2)

CAS Number		µg/Kg
108-95-2	Phenol	-
111-44-4	bis(2-Chloroethyl)Ether	78 U
95-57-8	2-Chlorophenol	-
541-73-1	1,3-Dichlorobenzene	78 U
106-46-7	1,4-Dichlorobenzene	-
100-51-6	Benzyl Alcohol	390 U
95-50-1	1,2-Dichlorobenzene	78 U
95-48-7	2-Methylphenol	78 U
39638-32-9	bis(2-chloroisopropyl)Ether	78 U
106-44-5	4-Methylphenol	78 U
621-64-7	N-Nitroso-Di-n-Propylamine	-
67-72-1	Hexachloroethane	160 U
98-95-3	Nitrobenzene	78 U
78-59-1	Isophorone	78 U
88-75-5	2-Nitrophenol	390 U
105-67-9	2,4-Dimethylphenol	160 U
65-85-0	Benzoic Acid	780 U
111-91-1	bis(2-Chloroethoxy)Methane	78 U
120-83-2	2,4-Dichlorophenol	230 U
120-82-1	1,2,4-Trichlorobenzene	-
91-20-3	Naphthalene	78 U
106-47-8	4-Chloroaniline	230 U
87-68-3	Hexachlorobutadiene	160 U
59-50-7	4-Chloro-3-Methylphenol	-
91-57-6	2-Methylnaphthalene	78 U
77-47-4	Hexachlorocyclopentadiene	390 U
88-06-2	2,4,6-Trichlorophenol	390 U
95-95-4	2,4,5-Trichlorophenol	390 U
91-58-7	2-Chloronaphthalene	78 U
88-74-4	2-Nitroaniline	390 U
131-11-3	Dimethyl Phthalate	78 U
208-96-8	Acenaphthylene	78 U
99-09-2	3-Nitroaniline	390 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	-
51-28-5	2,4-Dinitrophenol	780 U
100-02-7	4-Nitrophenol	-
132-64-9	Dibenzofuran	78 U
121-14-2	2,4-Dinitrotoluene	-
606-20-2	2,6-Dinitrotoluene	390 U
84-66-2	Diethylphthalate	78 U
7005-72-3	4-Chlorophenyl-phenylether	78 U
86-73-7	Fluorene	78 U
100-01-6	4-Nitroaniline	390 U
534-52-1	4,6-Dinitro-2-Methylphenol	780 U
86-30-6	N-Nitrosodiphenylamine(1)	78 U
101-55-3	4-Bromophenyl-phenylether	78 U
118-74-1	Hexachlorobenzene	78 U
87-86-5	Pentachlorophenol	-
85-01-8	Phenanthrene	78 U
120-12-7	Anthracene	78 U
84-74-2	Di-n-Butylphthalate	78 U
206-44-0	Fluoranthene	78 U
129-00-0	Pyrene	-
85-68-7	Butylbenzylphthalate	78 U
91-94-1	3,3'-Dichlorobenzidine	390 U
56-55-3	Benzo(a)Anthracene	78 U
117-81-7	bis(2-Ethylhexyl)Phthalate	78 U
218-01-9	Chrysene	78 U
117-84-0	Di-n-Octyl Phthalate	78 U
205-99-2	Benzo(b)Fluoranthene	78 U
207-08-9	Benzo(k)Fluoranthene	78 U
50-32-8	Benzo(a)Pyrene	78 U
193-39-5	Indeno(1,2,3-cd)Pyrene	78 U
53-70-3	Dibenz(a,h)Anthracene	78 U
191-24-2	Benzo(ghi)Perylene	78 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	122%
2-Fluorobiphenyl	108%
d14-p-Terphenyl	101%

***Acid surrogate recoveries**

d5-Phenol	100%
2-Fluorophenol	99.0%
2,4,6-Tribromophenol	113%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: **CP-108A-20**
Spike Duplicate

Lab Sample ID: 2444JMSD
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Date Release Authorized: Brian N. Rohr
Report revised 03/21/89 MAC:B

Amount extracted: 24.7 gm (Dry Weight)
Percent Moisture: 18.9%
pH: 7.5
Conc/Dilution: 1 to 1 (After GPC)

Date extracted: 01/04/89
Analyzed (FINN 2): 01/14/89
GPC Clean-up: YES (1 of 2)

CAS Number		µg/Kg
108-95-2	Phenol	-
111-44-4	bis(2-Chloroethyl)Ether	81 U
95-57-8	2-Chlorophenol	-
541-73-1	1,3-Dichlorobenzene	81 U
106-46-7	1,4-Dichlorobenzene	-
100-51-6	Benzyl Alcohol	400 U
95-50-1	1,2-Dichlorobenzene	81 U
95-48-7	2-Methylphenol	81 U
39638-32-9	bis(2-chloroisopropyl)Ether	81 U
106-44-5	4-Methylphenol	81 U
621-64-7	N-Nitroso-Di-n-Propylamine	-
67-72-1	Hexachloroethane	160 U
98-95-3	Nitrobenzene	81 U
78-59-1	Isophorone	81 U
88-75-5	2-Nitrophenol	400 U
105-67-9	2,4-Dimethylphenol	160 U
65-85-0	Benzoic Acid	810 U
111-91-1	bis(2-Chloroethoxy)Methane	81 U
120-83-2	2,4-Dichlorophenol	240 U
120-82-1	1,2,4-Trichlorobenzene	-
91-20-3	Naphthalene	81 U
106-47-8	4-Chloroaniline	240 U
87-68-3	Hexachlorobutadiene	160 U
59-50-7	4-Chloro-3-Methylphenol	-
91-57-6	2-Methylnaphthalene	81 U
77-47-4	Hexachlorocyclopentadiene	400 U
88-06-2	2,4,6-Trichlorophenol	400 U
95-95-4	2,4,5-Trichlorophenol	400 U
91-58-7	2-Chloronaphthalene	81 U
88-74-4	2-Nitroaniline	400 U
131-11-3	Dimethyl Phthalate	81 U
208-96-8	Acenaphthylene	81 U
99-09-2	3-Nitroaniline	400 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	-
51-28-5	2,4-Dinitrophenol	810 U
100-02-7	4-Nitrophenol	-
132-64-9	Dibenzofuran	81 U
121-14-2	2,4-Dinitrotoluene	-
606-20-2	2,6-Dinitrotoluene	400 U
84-66-2	Diethylphthalate	81 U
7005-72-3	4-Chlorophenyl-phenylether	81 U
86-73-7	Fluorene	81 U
100-01-6	4-Nitroaniline	400 U
534-52-1	4,6-Dinitro-2-Methylphenol	810 U
86-30-6	N-Nitrosodiphenylamine(1)	81 U
101-55-3	4-Bromophenyl-phenylether	81 U
118-74-1	Hexachlorobenzene	81 U
87-86-5	Pentachlorophenol	-
85-01-8	Phenanthrene	81 U
120-12-7	Anthracene	81 U
84-74-2	Di-n-Butylphthalate	81 U
206-44-0	Fluoranthene	81 U
129-00-0	Pyrene	-
85-68-7	Butylbenzylphthalate	81 U
91-94-1	3,3'-Dichlorobenzidine	400 U
56-55-3	Benzo(a)Anthracene	81 U
117-81-7	bis(2-Ethylhexyl)Phthalate	81 U
218-01-9	Chrysene	81 U
117-84-0	Di-n-Octyl Phthalate	81 U
205-99-2	Benzo(b)Fluoranthene	81 U
207-08-9	Benzo(k)Fluoranthene	81 U
50-32-8	Benzo(a)Pyrene	81 U
193-39-5	Indeno(1,2,3-cd)Pyrene	81 U
53-70-3	Dibenz(a,h)Anthracene	81 U
191-24-2	Benzo(ghi)Perylene	81 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	119%
2-Fluorobiphenyl	105%
d14-p-Terphenyl	95.9%

***Acid surrogate recoveries**

d5-Phenol	94.5%
2-Fluorophenol	93.4%
2,4,6-Tribromophenol	105%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: Method Blank

Lab Sample ID: 2444MB
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Date Release Authorized: [signature]
Report revised 03/21/89 MAC:B

Amount extracted: 30.0 gm (Dry Weight)
Percent Moisture: NA
pH: NA
Conc/Dilution: 1 to 1 (After GPC)

Date extracted: 01/04/89
Analyzed (FINN 2): 01/13/89
GPC Clean-up: YES (1 of 2)

CAS Number		µg/Kg
108-95-2	Phenol	67 U
111-44-4	bis(2-Chloroethyl)Ether	67 U
95-57-8	2-Chlorophenol	67 U
541-73-1	1,3-Dichlorobenzene	67 U
106-46-7	1,4-Dichlorobenzene	67 U
100-51-6	Benzyl Alcohol	330 U
95-50-1	1,2-Dichlorobenzene	67 U
95-48-7	2-Methylphenol	67 U
39638-32-9	bis(2-chloroisopropyl)Ether	67 U
106-44-5	4-Methylphenol	67 U
621-64-7	N-Nitroso-Di-n-Propylamine	67 U
67-72-1	Hexachloroethane	130 U
98-95-3	Nitrobenzene	67 U
78-59-1	Isophorone	67 U
88-75-5	2-Nitrophenol	330 U
105-67-9	2,4-Dimethylphenol	130 U
65-85-0	Benzoic Acid	670 U
111-91-1	bis(2-Chloroethoxy)Methane	67 U
120-83-2	2,4-Dichlorophenol	200 U
120-82-1	1,2,4-Trichlorobenzene	67 U
91-20-3	Naphthalene	67 U
106-47-8	4-Chloroaniline	200 U
87-68-3	Hexachlorobutadiene	130 U
59-50-7	4-Chloro-3-Methylphenol	130 U
91-57-6	2-Methylnaphthalene	67 U
77-47-4	Hexachlorocyclopentadiene	330 U
88-06-2	2,4,6-Trichlorophenol	330 U
95-95-4	2,4,5-Trichlorophenol	330 U
91-58-7	2-Chloronaphthalene	67 U
88-74-4	2-Nitroaniline	330 U
131-11-3	Dimethyl Phthalate	67 U
208-96-8	Acenaphthylene	67 U
99-09-2	3-Nitroaniline	330 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	67 U
51-28-5	2,4-Dinitrophenol	670 U
100-02-7	4-Nitrophenol	330 U
132-64-9	Dibenzofuran	67 U
121-14-2	2,4-Dinitrotoluene	330 U
606-20-2	2,6-Dinitrotoluene	330 U
84-66-2	Diethylphthalate	67 U
7005-72-3	4-Chlorophenyl-phenylether	67 U
86-73-7	Fluorene	67 U
100-01-6	4-Nitroaniline	330 U
534-52-1	4,6-Dinitro-2-Methylphenol	670 U
86-30-6	N-Nitrosodiphenylamine(1)	67 U
101-55-3	4-Bromophenyl-phenylether	67 U
118-74-1	Hexachlorobenzene	67 U
87-86-5	Pentachlorophenol	330 U
85-01-8	Phenanthrene	67 U
120-12-7	Anthracene	67 U
84-74-2	Di-n-Butylphthalate	67 U
206-44-0	Fluoranthene	67 U
129-00-0	Pyrene	67 U
85-68-7	Butylbenzylphthalate	67 U
91-94-1	3,3'-Dichlorobenzidine	330 U
56-55-3	Benzo(a)Anthracene	67 U
117-81-7	bis(2-Ethylhexyl)Phthalate	67 U
218-01-9	Chrysene	67 U
117-84-0	Di-n-Octyl Phthalate	67 U
205-99-2	Benzo(b)Fluoranthene	67 U
207-08-9	Benzo(k)Fluoranthene	67 U
50-32-8	Benzo(a)Pyrene	67 U
193-39-5	Indeno(1,2,3-cd)Pyrene	67 U
53-70-3	Dibenz(a,h)Anthracene	67 U
191-24-2	Benzo(ghi)Perylene	67 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	74.4%
2-Fluorobiphenyl	87.8%
d14-p-Terphenyl	74.7%

***Acid surrogate recoveries**

d5-Phenol	84.4%
2-Fluorophenol	81.8%
2,4,6-Tribromophenol	71.1%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: CP-108A-2.5

Lab Sample ID: 2444H
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Data Release Authorized: [signature]
Report prepared 01/19/89 - MAC:B

Amount Analyzed: 2.72 gm [Dry Weight]
Percent Moisture: 3.1%
pH: 6.3

Instrument: FINN I
Date Analyzed: 12/29/88

CAS Number		µg/Kg
74-87-3	Chloromethane	7.0 U
74-83-9	Bromomethane	5.7 U
75-01-4	Vinyl Chloride	3.7 U
75-00-3	Chloroethane	6.1 U
75-09-2	**Methylene Chloride**	**36**
67-64-1	Acetone	13 U
75-15-0	Carbon Disulfide	2.2 U
75-35-4	1,1-Dichloroethene	1.3 U
75-34-3	1,1-Dichloroethane	1.1 U
540-59-0	1,2-Dichloroethene (total)	1.5 U
67-66-3	Chloroform	2.0 U
107-06-2	1,2-Dichloroethane	0.9 U
78-93-3	2-Butanone	11.4 U
71-55-6	1,1,1-Trichloroethane	1.1 U
56-23-5	Carbon Tetrachloride	1.7 U
108-05-4	Vinyl Acetate	5.7 U
75-27-4	Bromodichloromethane	0.6 U
75-69-4	Trichlorofluoromethane	3.7 U

CAS Number		µg/Kg
78-87-5	1,2-Dichloropropane	1.3 U
10061-01-5	cis-1,3-Dichloropropene	3.3 U
79-01-6	Trichloroethene	1.1 U
124-48-1	Dibromochloromethane	1.3 U
79-00-5	1,1,2-Trichloroethane	1.3 U
71-43-2	Benzene	1.8 U
10061-02-6	Trans-1,3-Dichloropropene	3.5 U
110-75-8	2-Chloroethylvinylether	5.0 U
75-25-2	Bromoform	4.6 U
108-10-1	4-Methyl-2-Pentanone	6.4 U
591-78-6	2-Hexanone	5.9 U
127-18-4	**Tetrachloroethene**	**1.9**
79-34-5	1,1,2,2-Tetrachloroethane	5.0 U
108-88-3	**Toluene**	**5.6**
108-90-7	Chlorobenzene	1.7 U
100-41-4	**Ethylbenzene**	**2.3**
100-42-5	Styrene	2.0 U
	Total Xylenes	**7.3**
1,1,2-Trichloro-1,2,2-trifluoroethane		3.7 U

Surrogate Recoveries

d8-Toluene	108%
Bromofluorobenzene	77.5%
d4-1,2-Dichloroethane	98.7%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: Method Blank

Lab Sample ID: 1229MB
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Data Release Authorized: Susan N. Schu
Report prepared 01/19/89 - MAC:B

Instrument: FINN I
Date Analyzed: 12/29/88

Amount Analyzed: 5.0 gm [Equiv. Dry Weight]
Percent Moisture: NA
pH: NA

CAS Number		µg/Kg
74-87-3	Chloromethane	3.8 U
74-83-9	Bromomethane	3.1 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	3.3 U
75-09-2	Methylene Chloride	3.9 U
67-64-1	Acetone	6.9 U
75-15-0	Carbon Disulfide	1.2 U
75-35-4	1,1-Dichloroethene	0.7 U
75-34-3	1,1-Dichloroethane	0.6 U
540-59-0	1,2-Dichloroethene (total)	0.8 U
67-66-3	Chloroform	1.1 U
107-06-2	1,2-Dichloroethane	0.5 U
78-93-3	2-Butanone	6.2 U
71-55-6	1,1,1-Trichloroethane	0.6 U
56-23-5	Carbon Tetrachloride	0.9 U
108-05-4	Vinyl Acetate	3.1 U
75-27-4	Bromodichloromethane	0.3 U
75-69-4	Trichlorofluoromethane	2.0 U

CAS Number		µg/Kg
78-87-5	1,2-Dichloropropane	0.7 U
10061-01-5	cis-1,3-Dichloropropene	1.8 U
79-01-6	Trichloroethene	0.6 U
124-48-1	Dibromochloromethane	0.7 U
79-00-5	1,1,2-Trichloroethane	0.7 U
71-43-2	Benzene	1.0 U
10061-02-6	Trans-1,3-Dichloropropene	1.9 U
110-75-8	2-Chloroethylvinylether	2.7 U
75-25-2	Bromoform	2.5 U
108-10-1	4-Methyl-2-Pentanone	3.5 U
591-78-6	2-Hexanone	3.2 U
127-18-4	Tetrachloroethene	0.5 U
79-34-5	1,1,2,2-Tetrachloroethane	2.7 U
108-88-3	Toluene	0.8 U
108-90-7	Chlorobenzene	0.9 U
100-41-4	Ethylbenzene	0.8 U
100-42-5	Styrene	1.1 U
	Total Xylenes	1.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane		2.0 U

Surrogate Recoveries

d8-Toluene	97.6%
Bromofluorobenzene	94.7%
d4-1,2-Dichloroethane	96.3%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analyzed for but not detected at the given detection limit.

J — Indicates an estimated value when result is less than specified detection limit.

NR — Analysis not required

B — This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.

K — This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.

M — Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: Method Blank

Lab Sample ID: 1230MB
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Data Release Authorized: _____
Report prepared 01/19/89 - MAC:B

Instrument: FINN I
Date Analyzed: 12/30/88

Amount Analyzed: 5.0 gm [Equiv. Dry Weight]
Percent Moisture: NA
pH: NA

CAS Number		µg/Kg
74-87-3	Chloromethane	3.8 U
74-83-9	Bromomethane	3.1 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	3.3 U
75-09-2	Methylene Chloride	3.9 U
67-64-1	Acetone	6.9 U
75-15-0	Carbon Disulfide	1.2 U
75-35-4	1,1-Dichloroethene	0.7 U
75-34-3	1,1-Dichloroethane	0.6 U
540-59-0	1,2-Dichloroethene (total)	0.8 U
67-66-3	Chloroform	1.1 U
107-06-2	1,2-Dichloroethane	0.5 U
78-93-3	2-Butanone	6.2 U
71-55-6	1,1,1-Trichloroethane	0.6 U
56-23-5	Carbon Tetrachloride	0.9 U
108-05-4	Vinyl Acetate	3.1 U
75-27-4	Bromodichloromethane	0.3 U
75-69-4	Trichlorofluoromethane	2.0 U

CAS Number		µg/Kg
78-87-5	1,2-Dichloropropane	0.7 U
10061-01-5	cis-1,3-Dichloropropene	1.8 U
79-01-6	Trichloroethene	0.6 U
124-48-1	Dibromochloromethane	0.7 U
79-00-5	1,1,2-Trichloroethane	0.7 U
71-43-2	Benzene	1.0 U
10061-02-6	Trans-1,3-Dichloropropene	1.9 U
110-75-8	2-Chloroethylvinylether	2.7 U
75-25-2	Bromoform	2.5 U
108-10-1	4-Methyl-2-Pentanone	3.5 U
591-78-6	2-Hexanone	3.2 U
127-18-4	Tetrachloroethene	0.5 U
79-34-5	1,1,2,2-Tetrachloroethane	2.7 U
108-88-3	Toluene	0.8 U
108-90-7	Chlorobenzene	0.9 U
100-41-4	Ethylbenzene	0.8 U
100-42-5	Styrene	1.1 U
	Total Xylenes	1.8 U
1,1,2-Trichloro-1,2,2-trifluoroethane		2.0 U

Surrogate Recoveries

d8-Toluene	99.3%
Bromofluorobenzene	95.3%
d4-1,2-Dichloroethane	95.4%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: **CP-108A-0-5 Composite**

Lab Sample ID: 1230AD
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Data Release Authorized: Susan N. Abu
Report prepared 01/19/89 - MACB

Amount Analyzed: 0.095 gm [Equiv. Dry Weight]
Percent Moisture: 5.2%
pH: 6.6

Instrument: FINN I
Date Analyzed: 12/30/88

CAS Number		ug/Kg
74-87-3	Chloromethane	200 U
74-83-9	Bromomethane	160 U
75-01-4	Vinyl Chloride	110 U
75-00-3	Chloroethane	170 U
75-09-2	**Methylene Chloride**	**240**
67-64-1	Acetone	360 U
75-15-0	Carbon Disulfide	63 U
75-35-4	1,1-Dichloroethene	37 U
75-34-3	1,1-Dichloroethane	32 U
540-59-0	1,2-Dichloroethene (total)	42 U
67-66-3	Chloroform	58 U
107-06-2	1,2-Dichloroethane	26 U
78-93-3	2-Butanone	330 U
71-55-6	1,1,1-Trichloroethane	32 U
56-23-5	Carbon Tetrachloride	47 U
108-05-4	Vinyl Acetate	160 U
75-27-4	Bromodichloromethane	16 U
75-69-4	Trichlorofluoromethane	110 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	37 U
10061-01-5	cis-1,3-Dichloropropene	95 U
79-01-6	Trichloroethene	32 U
124-48-1	Dibromochloromethane	37 U
79-00-5	1,1,2-Trichloroethane	37 U
71-43-2	**Benzene**	**120**
10061-02-6	Trans-1,3-Dichloropropene	100 U
110-75-8	2-Chloroethylvinylether	140 U
75-25-2	Bromoform	130 U
108-10-1	4-Methyl-2-Pentanone	180 U
591-78-6	2-Hexanone	170 U
127-18-4	Tetrachloroethene	26 U
79-34-5	1,1,2,2-Tetrachloroethane	140 U
108-88-3	**Toluene**	**180**
108-90-7	Chlorobenzene	47 U
100-41-4	**Ethylbenzene**	**220**
100-42-5	Styrene	58 U
	Total Xylenes	**490**
1,1,2-Trichloro-1,2,2-trifluoroethane		110 U

Surrogate Recoveries

d8-Toluene	98.1%
Bromofluorobenzene	96.0%
d4-1,2-Dichloroethane	96.6%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: CP-108A-6-10

Lab Sample ID: 2444EG
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Data Release Authorized: Brian N. [illegible]
Report prepared 01/19/89 - MAC:B

Amount Analyzed: 0.016 gm [Equiv. Dry Weight]
Percent Moisture: 17.3%
pH: 6.3

Instrument: FINN I
Date Analyzed: 12/30/88

CAS Number		ug/Kg
74-87-3	Chloromethane	1200 U
74-83-9	Bromomethane	970 U
75-01-4	Vinyl Chloride	630 U
75-00-3	Chloroethane	1000 U
75-09-2	**Methylene Chloride**	**1600**
67-64-1	Acetone	2200 U
75-15-0	Carbon Disulfide	380 U
75-35-4	1,1-Dichloroethene	220 U
75-34-3	1,1-Dichloroethane	190 U
540-59-0	1,2-Dichloroethene (total)	250 U
67-66-3	Chloroform	340 U
107-06-2	1,2-Dichloroethane	160 U
78-93-3	2-Butanone	1900 U
71-55-6	1,1,1-Trichloroethane	190 U
56-23-5	Carbon Tetrachloride	280 U
108-05-4	Vinyl Acetate	970 U
75-27-4	Bromodichloromethane	90 U
75-69-4	Trichlorofluoromethane	630 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	220 U
10061-01-5	cis-1,3-Dichloropropene	560 U
79-01-6	Trichloroethene	190 U
124-48-1	Dibromochloromethane	220 U
79-00-5	1,1,2-Trichloroethane	220 U
71-43-2	Benzene	310 U
10061-02-6	Trans-1,3-Dichloropropene	590 U
110-75-8	2-Chloroethylvinylether	840 U
75-25-2	Bromoform	780 U
108-10-1	4-Methyl-2-Pentanone	1100 U
591-78-6	2-Hexanone	1000 U
127-18-4	Tetrachloroethene	160 U
79-34-5	1,1,2,2-Tetrachloroethane	840 U
108-88-3	Toluene	250 U
108-90-7	Chlorobenzene	280 U
100-41-4	Ethylbenzene	250 U
100-42-5	Styrene	340 U
	Total Xylenes	560 U
1,1,2-Trichloro-1,2,2-trifluoroethane		630 U

Surrogate Recoveries

d8-Toluene	99.0%
Bromofluorobenzene	99.2%
d4-1,2-Dichloroethane	95.0%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: CP-108A-20

Lab Sample ID: 2444J
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Data Release Authorized: _____
Report prepared 01/19/89 - MAC:B

Instrument: FINN I
Date Analyzed: 12/30/88

Amount Analyzed: 0.55 gm [Dry Weight]
Percent Moisture: 18.8%
pH: 7.5

CAS Number		ug/Kg
74-87-3	Chloromethane	35 U
74-83-9	Bromomethane	28 U
75-01-4	Vinyl Chloride	18 U
75-00-3	Chloroethane	30 U
75-09-2	**Methylene Chloride**	**44**
67-64-1	Acetone	63 U
75-15-0	Carbon Disulfide	11 U
75-35-4	1,1-Dichloroethene	6.4 U
75-34-3	1,1-Dichloroethane	5.5 U
540-59-0	1,2-Dichloroethene (total)	7.3 U
67-66-3	Chloroform	10 U
107-06-2	1,2-Dichloroethane	4.5 U
78-93-3	2-Butanone	56 U
71-55-6	1,1,1-Trichloroethane	5.5 U
56-23-5	Carbon Tetrachloride	8.2 U
108-05-4	Vinyl Acetate	28 U
75-27-4	Bromodichloromethane	2.7 U
75-69-4	Trichlorofluoromethane	18 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	6.4 U
10061-01-5	cis-1,3-Dichloropropene	16 U
79-01-6	Trichloroethene	5.5 U
124-48-1	Dibromochloromethane	6.4 U
79-00-5	1,1,2-Trichloroethane	6.4 U
71-43-2	Benzene	9.1 U
10061-02-6	Trans-1,3-Dichloropropene	17 U
110-75-8	2-Chloroethylvinylether	25 U
75-25-2	Bromoform	23 U
108-10-1	4-Methyl-2-Pentanone	32 U
591-78-6	2-Hexanone	29 U
127-18-4	Tetrachloroethene	4.5 U
79-34-5	1,1,2,2-Tetrachloroethane	25 U
108-88-3	Toluene	7.3 U
108-90-7	Chlorobenzene	8.2 U
100-41-4	Ethylbenzene	7.3 U
100-42-5	Styrene	10 U
	Total Xylenes	16 U
1,1,2-Trichloro-1,2,2-trifluoroethane		18 U

Surrogate Recoveries

d8-Toluene	99.5%
Bromofluorobenzene	96.6%
d4-1,2-Dichloroethane	96.4%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

ARI Job No: 2444

Client: Sweet Edwards
Project: S940702

Sample No: CP-108A-20

Level: Low

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC	QC LIMITS REC
1,1-Dichloroethene	57.1	0.0	54.2	95.0	59-172
Trichloroethene	57.1	0.0	52.0	91.2	62-137
Benzene	57.1	0.0	50.7	88.9	66-142
Toluene	57.1	0.0	59.5	104	59-139
Chlorobenzene	57.1	0.0	46.2	80.9	60-133

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC
1,1-Dichloroethene	57.1	54.5	95.4	-0.4	22	59-172
Trichloroethene	57.1	52.2	91.5	-0.4	24	62-137
Benzene	57.1	49.9	87.4	1.7	21	66-142
Toluene	57.1	60.3	106	-1.3	21	59-139
Chlorobenzene	57.1	46.6	81.7	-1.0	21	60-133

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Asterisked values outside QC Limits

Comments: 4.38 gram dry weight sample size

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: **CP-108A-20**
Matrix Spike

Lab Sample ID: 2444JMS
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Data Release Authorized: Brian N. Cebe
Report prepared 01/19/89 - MAC:B

Amount Analyzed: 4.37 gm [Dry Weight]
Percent Moisture: 18.8%
pH: 7.5

Instrument: FINN I
Date Analyzed: 12/30/88

CAS Number		ug/Kg
74-87-3	Chloromethane	4.3 U
74-83-9	Bromomethane	3.5 U
75-01-4	Vinyl Chloride	2.3 U
75-00-3	Chloroethane	3.8 U
75-09-2	**Methylene Chloride**	**9.8**
67-64-1	Acetone	7.9 U
75-15-0	Carbon Disulfide	1.4 U
75-35-4	1,1-Dichloroethene	-
75-34-3	1,1-Dichloroethane	0.7 U
540-59-0	1,2-Dichloroethene (total)	0.9 U
67-66-3	Chloroform	1.3 U
107-06-2	1,2-Dichloroethane	0.6 U
78-93-3	2-Butanone	7.1 U
71-55-6	1,1,1-Trichloroethane	0.7 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	3.5 U
75-27-4	Bromodichloromethane	0.3 U
75-69-4	Trichlorofluoromethane	2.3 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	0.8 U
10061-01-5	cis-1,3-Dichloropropene	2.1 U
79-01-6	Trichloroethene	-
124-48-1	Dibromochloromethane	0.8 U
79-00-5	1,1,2-Trichloroethane	0.8 U
71-43-2	Benzene	-
10061-02-6	Trans-1,3-Dichloropropene	2.2 U
110-75-8	2-Chloroethylvinylether	3.1 U
75-25-2	Bromoform	2.9 U
108-10-1	4-Methyl-2-Pentanone	4.0 U
591-78-6	2-Hexanone	3.7 U
127-18-4	Tetrachloroethene	0.6 U
79-34-5	1,1,2,2-Tetrachloroethane	3.1 U
108-88-3	Toluene	-
108-90-7	Chlorobenzene	-
100-41-4	Ethylbenzene	0.9 U
100-42-5	Styrene	1.3 U
	Total Xylenes	2.1 U
1,1,2-Trichloro-1,2,2-trifluoroethane		2.3 U

Surrogate Recoveries

d8-Toluene	99.2%
Bromofluorobenzene	98.5%
d4-1,2-Dichloroethane	97.7%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: **CP-108A-20 Spike Duplicate**

Lab Sample ID: 2444JMSD
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Data Release Authorized: [signature]
Report prepared 01/19/89 - MAC:B

Amount Analyzed: 4.40 gm [Dry Weight]
Percent Moisture: 18.8%
pH: 7.5

Instrument: FINN I
Date Analyzed: 12/30/88

CAS Number		ug/Kg
74-87-3	Chloromethane	4.3 U
74-83-9	Bromomethane	3.5 U
75-01-4	Vinyl Chloride	2.3 U
75-00-3	Chloroethane	3.8 U
75-09-2	**Methylene Chloride**	**11**
67-64-1	Acetone	7.8 U
75-15-0	Carbon Disulfide	1.4 U
75-35-4	1,1-Dichloroethene	-
75-34-3	1,1-Dichloroethane	0.7 U
540-59-0	1,2-Dichloroethene (total)	0.9 U
67-66-3	Chloroform	1.3 U
107-06-2	1,2-Dichloroethane	0.6 U
78-93-3	2-Butanone	7.0 U
71-55-6	1,1,1-Trichloroethane	0.7 U
56-23-5	Carbon Tetrachloride	1.0 U
108-05-4	Vinyl Acetate	3.5 U
75-27-4	Bromodichloromethane	0.3 U
75-69-4	Trichlorofluoromethane	2.3 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	0.8 U
10061-01-5	cis-1,3-Dichloropropene	2.0 U
79-01-6	Trichloroethene	-
124-48-1	Dibromochloromethane	0.8 U
79-00-5	1,1,2-Trichloroethane	0.8 U
71-43-2	Benzene	-
10061-02-6	Trans-1,3-Dichloropropene	2.2 U
110-75-8	2-Chloroethylvinylether	3.1 U
75-25-2	Bromoform	2.8 U
108-10-1	4-Methyl-2-Pentanone	4.0 U
591-78-6	2-Hexanone	3.6 U
127-18-4	Tetrachloroethene	0.6 U
79-34-5	1,1,2,2-Tetrachloroethane	3.1 U
108-88-3	Toluene	-
108-90-7	Chlorobenzene	-
100-41-4	Ethylbenzene	0.9 U
100-42-5	Styrene	1.3 U
	Total Xylenes	2.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane		2.3 U

Surrogate Recoveries

d8-Toluene	101%
Bromofluorobenzene	99.3%
d4-1,2-Dichloroethane	93.3%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: CP-108A-15

Lab Sample ID: 24441
Sample Matrix: Soils/Sediments

QC Report No: 2444-Sweet Edwards
Project No: S940702 [Pier 91]
Date Received: 12/28/88

Data Release Authorized: [signature]
Report prepared 01/19/89 - MAC:B

Amount Analyzed: 2.31 gm [Dry Weight]
Percent Moisture: 18.4%
pH: 6.2

Instrument: FINN I
Date Analyzed: 12/30/88

CAS Number		ug/Kg
74-87-3	Chloromethane	8.2 U
74-83-9	Bromomethane	6.7 U
75-01-4	Vinyl Chloride	4.3 U
75-00-3	Chloroethane	7.1 U
75-09-2	**Methylene Chloride**	**8.5**
67-64-1	Acetone	15 U
75-15-0	Carbon Disulfide	2.6 U
75-35-4	1,1-Dichloroethene	1.5 U
75-34-3	1,1-Dichloroethane	1.3 U
540-59-0	1,2-Dichloroethene (total)	1.7 U
67-66-3	Chloroform	2.4 U
107-06-2	1,2-Dichloroethane	1.1 U
78-93-3	2-Butanone	13 U
71-55-6	1,1,1-Trichloroethane	1.3 U
56-23-5	Carbon Tetrachloride	1.9 U
108-05-4	Vinyl Acetate	6.7 U
75-27-4	Bromodichloromethane	0.6 U
75-69-4	Trichlorofluoromethane	4.3 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	1.5 U
10061-01-5	cis-1,3-Dichloropropene	3.9 U
79-01-6	Trichloroethene	1.3 U
124-48-1	Dibromochloromethane	1.5 U
79-00-5	1,1,2-Trichloroethane	1.5 U
71-43-2	Benzene	2.2 U
10061-02-6	Trans-1,3-Dichloropropene	4.1 U
110-75-8	2-Chloroethylvinylether	5.8 U
75-25-2	Bromoform	5.4 U
108-10-1	4-Methyl-2-Pentanone	7.6 U
591-78-6	2-Hexanone	6.9 U
127-18-4	Tetrachloroethene	1.1 U
79-34-5	1,1,2,2-Tetrachloroethane	5.8 U
108-88-3	Toluene	1.7 U
108-90-7	Chlorobenzene	1.9 U
100-41-4	Ethylbenzene	1.7 U
100-42-5	Styrene	2.4 U
	Total Xylenes	3.9 U
1,1,2-Trichloro-1,2,2-trifluoroethane		4.3 U

Surrogate Recoveries

d8-Toluene	101%
Bromofluorobenzene	94.8%
d4-1,2-Dichloroethane	95.5%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL RESOURCES INCORPORATED

Analytical Chemists & Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 625

Sample No: Method Blank

Lab Sample ID: 2413MB
Sample Matrix: Waters

Date Release Authorized: [signature]
Report Prepared: 01/15/89 M4C4

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received: 12/20/88

Date Extracted: 12/27/88
Date Analyzed: 12/28/88
GPC Clean-up: NO
Instrument ID: FINN IV

Sample Volume: 1000 ml
Final Extract Volume: 1.0 ml
Conc/Dilution Factor: 1:1
Total Conc/Dilution: 1:1

CAS Number		ug/L
108-95-2	Phenol	1.0 U
111-44-4	bis(2-Chloroethyl)Ether	1.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	1.0 U
39638-32-9	bis(2-chloroisopropyl)Ether	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	1.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	2.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy)Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	4-Chloro-3-Methylphenol	2.0 U
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethyl Phthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	5.0 U

CAS Number		ug/L
83-32-9	Acenaphthene	1.0 U
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	Dibenzofuran	1.0 U
121-14-2	2,4-Dinitrotoluene	5.0 U
606-20-2	2,6-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	Fluorene	1.0 U
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine(1)	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	Phenanthrene	1.0 U
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	Fluoranthene	1.0 U
129-00-0	Pyrene	1.0 U
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)Anthracene	1.0 U
117-81-7	bis(2-Ethylhexyl)Phthalate	1.0 U
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl Phthalate	1.0 U
205-99-2	Benzo(b)Fluoranthene	1.0 U
207-08-9	Benzo(k)Fluoranthene	1.0 U
50-32-8	Benzo(a)Pyrene	1.0 U
193-39-5	Indeno(1,2,3-cd)Pyrene	1.0 U
53-70-3	Dibenz(a,h)Anthracene	1.0 U
191-24-2	Benzo(ghi)Perylene	1.0 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	67.3%
2-Fluorobiphenyl	57.9%
d14-p-Terphenyl	105%

***Acid surrogate recoveries**

d5-Phenol	22.1%
2-Fluorophenol	43.0%
2,4,6-Tribromophenol	70.5%

ANALYTICAL RESOURCES INCORPORATED

Analytical Chemists & Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 625

Sample No: TB3 A

Lab Sample ID: 2413F
Sample Matrix: Waters

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received: 12/20/88

Date Release Authorized: [signature]
Report Prepared: 01/13/89 MAGA

Sample Volume: 1000 ml
Final Extract Volume: 1.0 ml
Conc/Dilution Factor: 1:1
Total Conc/Dilution: 1:1

Date Extracted: 12/27/88
Date Analyzed: 12/29/88
GPC Clean-up: NO
Instrument ID: FINN IV

CAS Number		ug/L
108-95-2	**Phenol**	**1.3**
111-44-4	bis(2-Chloroethyl)Ether	1.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	1.0 U
39638-32-9	bis(2-chloroisopropyl)Ether	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	1.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	**2,4-Dimethylphenol**	**1.3 M**
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy)Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	**4-Chloro-3-Methylphenol**	**25 M**
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethyl Phthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	5.0 U

CAS Number		ug/L
83-32-9	**Acenaphthene**	**1.7**
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	Dibenzofuran	1.0 U
121-14-2	2,4-Dinitrotoluene	5.0 U
606-20-2	2,6-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	**Fluorene**	**2.9**
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine(1)	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	**Phenanthrene**	**1.5**
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	**Fluoranthene**	**1.2**
129-00-0	**Pyrene**	**1.8**
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	Benzo(a)Anthracene	1.0 U
117-81-7	**bis(2-Ethylhexyl)Phthalate**	**58**
218-01-9	Chrysene	1.0 U
117-84-0	Di-n-Octyl Phthalate	1.0 U
205-99-2	**Benzo(b)Fluoranthene &**	
207-08-9	**Benzo(k)Fluoranthene**	**1.2**
50-32-8	**Benzo(a)Pyrene**	**0.5 J**
193-39-5	**Indeno(1,2,3-cd)Pyrene**	**0.6 J**
53-70-3	Dibenz(a,h)Anthracene	1.0 U
191-24-2	**Benzo(ghi)Perylene**	**0.8 J**

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	39.3%
2-Fluorobiphenyl	47.5%
d14-p-Terphenyl	43.9%

***Acid surrogate recoveries**

d5-Phenol	20.4%
2-Fluorophenol	27.8%
2,4,6-Tribromophenol	35.3%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 625

Sample No: TB3 B

Lab Sample ID: 2413G
Sample Matrix: Waters

Date Release Authorized: Brian N. Ogden
Report Prepared: 01/13/89 MACA

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received: 12/20/88

Date Extracted: 12/27/88
Date Analyzed: 12/28/88
GPC Clean-up: NO
Instrument ID: FINN IV

Sample Volume: 1000 ml
Final Extract Volume: 1.0 ml
Conc/Dilution Factor: 1:1
Total Conc/Dilution: 1:1

CAS Number		ug/L
108-95-2	**Phenol**	**1.7**
111-44-4	bis(2-Chloroethyl)Ether	1.0 U
95-57-8	2-Chlorophenol	1.0 U
541-73-1	1,3-Dichlorobenzene	1.0 U
106-46-7	1,4-Dichlorobenzene	1.0 U
100-51-6	Benzyl Alcohol	5.0 U
95-50-1	1,2-Dichlorobenzene	1.0 U
95-48-7	2-Methylphenol	1.0 U
39638-32-9	bis(2-chloroisopropyl)Ether	1.0 U
106-44-5	4-Methylphenol	1.0 U
621-64-7	N-Nitroso-Di-n-Propylamine	1.0 U
67-72-1	Hexachloroethane	2.0 U
98-95-3	Nitrobenzene	1.0 U
78-59-1	Isophorone	1.0 U
88-75-5	2-Nitrophenol	5.0 U
105-67-9	2,4-Dimethylphenol	2.0 U
65-85-0	Benzoic Acid	10 U
111-91-1	bis(2-Chloroethoxy)Methane	1.0 U
120-83-2	2,4-Dichlorophenol	3.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0 U
91-20-3	Naphthalene	1.0 U
106-47-8	4-Chloroaniline	3.0 U
87-68-3	Hexachlorobutadiene	2.0 U
59-50-7	**4-Chloro-3-Methylphenol**	**25**
91-57-6	2-Methylnaphthalene	1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0 U
91-58-7	2-Chloronaphthalene	1.0 U
88-74-4	2-Nitroaniline	5.0 U
131-11-3	Dimethyl Phthalate	1.0 U
208-96-8	Acenaphthylene	1.0 U
99-09-2	3-Nitroaniline	5.0 U

CAS Number		ug/L
83-32-9	**Acenaphthene**	**2.1**
51-28-5	2,4-Dinitrophenol	10 U
100-02-7	4-Nitrophenol	5.0 U
132-64-9	Dibenzofuran	1.0 U
121-14-2	2,4-Dinitrotoluene	5.0 U
606-20-2	2,6-Dinitrotoluene	5.0 U
84-66-2	Diethylphthalate	1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0 U
86-73-7	**Fluorene**	**3.8**
100-01-6	4-Nitroaniline	5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10 U
86-30-6	N-Nitrosodiphenylamine(1)	1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0 U
118-74-1	Hexachlorobenzene	1.0 U
87-86-5	Pentachlorophenol	5.0 U
85-01-8	**Phenanthrene**	**1.9**
120-12-7	Anthracene	1.0 U
84-74-2	Di-n-Butylphthalate	1.0 U
206-44-0	**Fluoranthene**	**1.1**
129-00-0	**Pyrene**	**1.7**
85-68-7	Butylbenzylphthalate	1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0 U
56-55-3	**Benzo(a)Anthracene**	**0.8 J**
117-81-7	**bis(2-Ethylhexyl)Phthalate**	**66**
218-01-9	**Chrysene**	**1.3**
117-84-0	Di-n-Octyl Phthalate	1.0 U
205-99-2	**Benzo(b)Fluoranthene &**	
207-08-9	**Benzo(k)Fluoranthene**	**1.9**
50-32-8	**Benzo(a)Pyrene**	**1.1**
193-39-5	**Indeno(1,2,3-cd)Pyrene**	**1.8**
53-70-3	**Dibenz(a,h)Anthracene**	**1.1**
191-24-2	**Benzo(ghi)Perylene**	**1.5**

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	34.5%
2-Fluorobiphenyl	44.8%
d14-p-Terphenyl	44.9%

***Acid surrogate recoveries**

d5-Phenol	18.1%
2-Fluorophenol	23.5%
2,4,6-Tribromophenol	51.5%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: SB 2A

Lab Sample ID: 2413H
Sample Matrix: Soil/Sediments

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received 12/20/88

Date Release Authorized: Brian N. Sahe
Report Revised: 03/21/89 MAC: A

Dry weight extracted (gm): 16.70
Final Volume: 1.0 ml
Percent Moisture: 21.39%
pH: 7.73
Conc/Dilution Factor: 1 to 10
Total Dilution: 1 to 20

Date Extracted: 12/29/88
Date Analyzed: 01/10/89
GPC Clean-up: YES (1 of 2)
Instrument ID: FINN IV

CAS Number		µg/Kg
108-95-2	Phenol	1200 U
111-44-4	bis(2-Chloroethyl)Ether	1200 U
95-57-8	2-Chlorophenol	1200 U
541-73-1	1,3-Dichlorobenzene	1200 U
106-46-7	1,4-Dichlorobenzene	1200 U
100-51-6	Benzyl Alcohol	6000 U
95-50-1	1,2-Dichlorobenzene	1200 U
95-48-7	2-Methylphenol	1200 U
39638-32-9	bis(2-chloroisopropyl)Ether	1200 U
106-44-5	4-Methylphenol	1200 U
621-64-7	N-Nitroso-Di-n-Propylamine	1200 U
67-72-1	Hexachloroethane	2400 U
98-95-3	Nitrobenzene	1200 U
78-59-1	Isophorone	1200 U
88-75-5	2-Nitrophenol	6000 U
105-67-9	2,4-Dimethylphenol	2400 U
65-85-0	Benzoic Acid	12000 U
111-91-1	bis(2-Chloroethoxy)Methane	1200 U
120-83-2	2,4-Dichlorophenol	3600 U
120-82-1	1,2,4-Trichlorobenzene	1200 U
91-20-3	**Naphthalene**	**130000**
106-47-8	4-Chloroaniline	3600 U
87-68-3	Hexachlorobutadiene	2400 U
59-50-7	4-Chloro-3-Methylphenol	2400 U
91-57-6	**2-Methylnaphthalene**	**240000 K**
77-47-4	Hexachlorocyclopentadiene	6000 U
88-06-2	2,4,6-Trichlorophenol	6000 U
95-95-4	2,4,5-Trichlorophenol	6000 U
91-58-7	2-Chloronaphthalene	1200 U
88-74-4	2-Nitroaniline	6000 U
131-11-3	Dimethyl Phthalate	1200 U
208-96-8	Acenaphthylene	1200 U
99-09-2	3-Nitroaniline	6000 U

CAS Number		µg/Kg
83-32-9	**Acenaphthene**	**90000**
51-28-5	2,4-Dinitrophenol	12000 U
100-02-7	4-Nitrophenol	6000 U
132-64-9	**Dibenzofuran**	**130000**
121-14-2	2,4-Dinitrotoluene	6000 U
606-20-2	2,6-Dinitrotoluene	6000 U
84-66-2	Diethylphthalate	1200 U
7005-72-3	4-Chlorophenyl-phenylether	1200 U
86-73-7	**Fluorene**	**120000**
100-01-6	4-Nitroaniline	6000 U
534-52-1	4,6-Dinitro-2-Methylphenol	12000 U
86-30-6	N-Nitrosodiphenylamine(1)	1200 U
101-55-3	4-Bromophenyl-phenylether	1200 U
118-74-1	Hexachlorobenzene	1200 U
87-86-5	Pentachlorophenol	6000 U
85-01-8	**Phenanthrene**	**280000 K**
120-12-7	**Anthracene**	**52000**
84-74-2	Di-n-Butylphthalate	1200 U
206-44-0	**Fluoranthene**	**120000**
129-00-0	**Pyrene**	**110000**
85-68-7	Butylbenzylphthalate	1200 U
91-94-1	3,3'-Dichlorobenzidine	6000 U
56-55-3	**Benzo(a)Anthracene**	**20000**
117-81-7	**bis(2-Ethylhexyl)Phthalate**	**7400**
218-01-9	**Chrysene**	**29000**
117-84-0	Di-n-Octyl Phthalate	1200 U
205-99-2	**Benzo(b)Fluoranthene &**	
207-08-9	**Benzo(k)Fluoranthene**	**13000**
50-32-8	**Benzo(a)Pyrene**	**7100**
193-39-5	**Indeno(1,2,3-cd)Pyrene**	**2700**
53-70-3	**Dibenz(a,h)Anthracene**	**560 J**
191-24-2	**Benzo(ghi)Perylene**	**2000**

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	73.7%
2-Fluorobiphenyl	122%
d14-o-Terphenyl	147%

***Acid surrogate recoveries**

d5-Phenol	100%
2-Fluorophenol	69.3%
2,4,6-Tribromophenol	89.9%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: SB 2A Rerun

Lab Sample ID: 2413HR
Sample Matrix: Soil/Sediments

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received: 12/20/88

Date Release Authorized: Brian N. Ruben
Report Revised: 03/21/89 MAC: A

Dry weight extracted (gm): 16.70
Final Volume: 1.0 ml
Percent Moisture: 21.39%
pH: 7.73
Conc/Dilution Factor: 1 to 40
Total Dilution: 1 to 80

Date Extracted: 12/29/88
Date Analyzed: 01/10/89
GPC Clean-up: YES (1 of 2)
Instrument ID: FINN IV

CAS Number		µg/Kg
108-95-2	Phenol	4800 U
111-44-4	bis(2-Chloroethyl)Ether	4800 U
95-57-8	2-Chlorophenol	4800 U
541-73-1	1,3-Dichlorobenzene	4800 U
106-46-7	1,4-Dichlorobenzene	4800 U
100-51-6	Benzyl Alcohol	24000 U
95-50-1	1,2-Dichlorobenzene	4800 U
95-48-7	2-Methylphenol	4800 U
39638-32-9	bis(2-chloroisopropyl)Ether	4800 U
106-44-5	4-Methylphenol	4800 U
621-64-7	N-Nitroso-Di-n-Propylamine	4800 U
67-72-1	Hexachloroethane	9600 U
98-95-3	Nitrobenzene	4800 U
78-59-1	Isophorone	4800 U
88-75-5	2-Nitrophenol	24000 U
105-67-9	2,4-Dimethylphenol	9600 U
65-85-0	Benzoic Acid	48000 U
111-91-1	bis(2-Chloroethoxy)Methane	4800 U
120-83-2	2,4-Dichlorophenol	14000 U
120-82-1	1,2,4-Trichlorobenzene	4800 U
91-20-3	**Naphthalene**	**210000**
106-47-8	4-Chloroaniline	14000 U
87-68-3	Hexachlorobutadiene	9600 U
59-50-7	4-Chloro-3-Methylphenol	9600 U
91-57-6	**2-Methylnaphthalene**	**430000**
77-47-4	Hexachlorocyclopentadiene	24000 U
88-06-2	2,4,6-Trichlorophenol	24000 U
95-95-4	2,4,5-Trichlorophenol	24000 U
91-58-7	2-Chloronaphthalene	4800 U
88-74-4	2-Nitroaniline	24000 U
131-11-3	Dimethyl Phthalate	4800 U
208-96-8	Acenaphthylene	4800 U
99-09-2	3-Nitroaniline	24000 U

CAS Number		µg/Kg
83-32-9	**Acenaphthene**	**110000**
51-28-5	2,4-Dinitrophenol	48000 U
100-02-7	4-Nitrophenol	24000 U
132-64-9	**Dibenzofuran**	**190000**
121-14-2	2,4-Dinitrotoluene	24000 U
606-20-2	2,6-Dinitrotoluene	24000 U
84-66-2	Diethylphthalate	4800 U
7005-72-3	4-Chlorophenyl-phenylether	4800 U
86-73-7	**Fluorene**	**170000**
100-01-6	4-Nitroaniline	24000 U
534-52-1	4,6-Dinitro-2-Methylphenol	48000 U
86-30-6	N-Nitrosodiphenylamine(1)	4800 U
101-55-3	4-Bromophenyl-phenylether	4800 U
118-74-1	Hexachlorobenzene	4800 U
87-86-5	Pentachlorophenol	24000 U
85-01-8	**Phenanthrene**	**530000**
120-12-7	**Anthracene**	**58000**
84-74-2	Di-n-Butylphthalate	4800 U
206-44-0	**Fluoranthene**	**190000**
129-00-0	**Pyrene**	**180000**
85-68-7	Butylbenzylphthalate	4800 U
91-94-1	3,3'-Dichlorobenzidine	24000 U
56-55-3	**Benzo(a)Anthracene**	**20000**
117-81-7	**bis(2-Ethylhexyl)Phthalate**	**7000**
218-01-9	**Chrysene**	**30000**
117-84-0	Di-n-Octyl Phthalate	4800 U
205-99-2	**Benzo(b)Fluoranthene &**	
207-08-9	**Benzo(k)Fluoranthene**	**16000**
50-32-8	**Benzo(a)Pyrene**	**9000**
193-39-5	**Indeno(1,2,3-cd)Pyrene**	**4100 J**
53-70-3	**Dibenz(a,h)Anthracene**	**1900 J**
191-24-2	**Benzo(ghi)Perylene**	**3100 J**

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	63.7%
2-Fluorobiphenyl	128%
d14-p-Terphenyl	139%

***Acid surrogate recoveries**

d5-Phenol	104%
2-Fluorophenol	68.6%
2,4,6-Tribromophenol	83.0%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

ARI Job No: 2413

Client: Sweet Edwards
Project: Pier 91

Sample No: TB3 B

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC	QC LIMITS REC
1,1-Dichloroethene	50.0	0.0	56.9	114	61-145
Trichloroethene	50.0	1.5	60.8	119	71-120
Benzene	50.0	1.5	53.7	104	76-127
Toluene	50.0	3.2	65.2	124	76-125
Chlorobenzene	50.0	0.0	47.2	94.3	75-130

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC
1,1-Dichloroethene	50.0	55.9	112	1.8	14	61-145
Trichloroethene	50.0	59.3	115	2.7	14	71-120
Benzene	50.0	52.7	102	1.8	11	76-127
Toluene	50.0	65.1	124	0.2	13	76-125
Chlorobenzene	50.0	44.2	88.5	6.4	13	75-130

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Asterisked values outside QC Limits

Comments:

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS - METHOD 8240

Sample No: TB3 B Matrix Spike

Lab Sample ID: 2413GMS
Sample Matrix: Waters

QC Report No: 2413-Sweet Edwards
Project No: Pier 91
Date Received: 12/20/88

Data Release Authorized:
Report prepared 01/05/89 - MACB

Instrument: FINN 3
Date Analyzed: 12/22/88

Amount Analyzed: 5 mls
Conc/Dil: 1 to 1

CAS Number		ug/L
74-87-3	Chloromethane	2.9 U
74-83-9	Bromomethane	0.9 U
75-01-4	**Vinyl Chloride**	**3.1**
75-00-3	Chloroethane	0.9 U
75-09-2	**Methylene Chloride**	**3.4 B**
67-64-1	**Acetone**	**16**
75-15-0	Carbon Disulfide	2.0 U
75-35-4	1,1-Dichloroethene	-
75-34-3	**1,1-Dichloroethane**	**20**
540-59-0	**1,2-Dichloroethene (total)**	**2.6**
67-66-3	**Chloroform**	**1.9**
107-06-2	**1,2-Dichloroethane**	**1.9**
78-93-3	**2-Butanone**	**2.3 M**
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	0.5 U
108-05-4	Vinyl Acetate	1.7 U
75-27-4	Bromodichloromethane	0.2 U
75-69-4	Trichlorofluoromethane	2.0 U

CAS Number		ug/L
78-87-5	1,2-Dichloropropane	0.6 U
10061-02-6	Trans-1,3-Dichloropropene	0.5 U
79-01-6	Trichloroethene	-
124-48-1	Dibromochloromethane	0.9 U
79-00-5	1,1,2-Trichloroethane	0.3 U
71-43-2	Benzene	-
10061-01-5	cis-1,3-Dichloropropene	0.6 U
110-75-8	2-Chloroethylvinylether	1.5 U
75-25-2	Bromoform	0.3 U
108-10-1	4-Methyl-2-Pentanone	1.8 U
591-78-6	2-Hexanone	1.3 U
127-18-4	**Tetrachloroethene**	**1.3**
79-34-5	1,1,2,2-Tetrachloroethane	0.6 U
108-88-3	Toluene	-
108-90-7	Chlorobenzene	-
100-41-4	**Ethylbenzene**	**27**
100-42-5	Styrene	0.5 U
	Total Xylenes	**1.1 M**
1,1,2-Trichloro-1,2,2-trifluoroethane		2.0 U

Surrogate Recoveries

d8-Toluene	96.6%
Bromofluorobenzene	104%
d4-1,2-Dichloroethane	95.3%

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS - METHOD 8240

Sample No: TB3 A

Lab Sample ID: 2413F
Sample Matrix: Waters

QC Report No: 2413-Sweet Edwards
Project No: Pier 91
Date Received: 12/20/88

Data Release Authorized: Susan D Rosen
Report prepared 01/05/89 - MACB

Instrument: FINN 3
Date Analyzed: 12/22/88

Amount Analyzed: 5 mls
Conc/Dil: 1 to 1

CAS Number		ug/L
74-87-3	Chloromethane	2.9 U
74-83-9	Bromomethane	0.9 U
75-01-4	**Vinyl Chloride**	**3.5**
75-00-3	Chloroethane	0.9 U
75-09-2	**Methylene Chloride**	**14 B**
67-64-1	**Acetone**	**20**
75-15-0	Carbon Disulfide	2.0 U
75-35-4	1,1-Dichloroethene	1.3 U
75-34-3	**1,1-Dichloroethane**	**21**
540-59-0	**1,2-Dichloroethene (total)**	**2.5**
67-66-3	**Chloroform**	**1.2**
107-06-2	**1,2-Dichloroethane**	**1.1**
78-93-3	**2-Butanone**	**1.1 M**
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	0.5 U
108-05-4	Vinyl Acetate	1.7 U
75-27-4	Bromodichloromethane	0.2 U
75-69-4	Trichlorofluoromethane	2.0 U

CAS Number		ug/L
78-87-5	1,2-Dichloropropane	0.6 U
10061-02-6	Trans-1,3-Dichloropropene	0.5 U
79-01-6	**Trichloroethene**	**1.4**
124-48-1	Dibromochloromethane	0.9 U
79-00-5	1,1,2-Trichloroethane	0.3 U
71-43-2	**Benzene**	**1.6**
10061-01-5	cis-1,3-Dichloropropene	0.6 U
110-75-8	2-Chloroethylvinylether	1.5 U
75-25-2	Bromoform	0.3 U
108-10-1	4-Methyl-2-Pentanone	1.8 U
591-78-6	2-Hexanone	1.3 U
127-18-4	**Tetrachloroethene**	**1.4**
79-34-5	1,1,2,2-Tetrachloroethane	0.6 U
108-88-3	**Toluene**	**3.7**
108-90-7	Chlorobenzene	0.6 U
100-41-4	**Ethylbenzene**	**36**
100-42-5	Styrene	0.5 U
	Total Xylenes	**1.3**
1,1,2-Trichloro-1,2,2-trifluoroethane		2.0 U

Surrogate Recoveries

d8-Toluene	99.8%
Bromofluorobenzene	111%
d4-1,2-Dichloroethane	96.3%

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS - METHOD 8240

Sample No: TB3 B Spike Duplicate

Lab Sample ID: 2413GMSD
Sample Matrix: Waters

QC Report No: 2413-Sweet Edwards
Project No: Pier 91
Date Received: 12/20/88

Data Release Authorized: Susan D Rosa
Report prepared 01/05/89 - MACB

Instrument: FINN 3
Date Analyzed: 12/22/88

Amount Analyzed: 5 mls
Conc/Dil: 1 to 1

CAS Number		ug/L
74-87-3	Chloromethane	2.9 U
74-83-9	Bromomethane	0.9 U
75-01-4	**Vinyl Chloride**	**2.9**
75-00-3	Chloroethane	0.9 U
75-09-2	**Methylene Chloride**	**4.0 B**
67-64-1	**Acetone**	**20**
75-15-0	Carbon Disulfide	2.0 U
75-35-4	1,1-Dichloroethene	-
75-34-3	**1,1-Dichloroethane**	**20**
540-59-0	**1,2-Dichloroethene (total)**	**2.5**
67-66-3	**Chloroform**	**1.9**
107-06-2	**1,2-Dichloroethane**	**1.9**
78-93-3	**2-Butanone**	**2.0 M**
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	0.5 U
108-05-4	Vinyl Acetate	1.7 U
75-27-4	Bromodichloromethane	0.2 U
75-69-4	Trichlorofluoromethane	2.0 U

CAS Number		ug/L
78-87-5	1,2-Dichloropropane	0.6 U
10061-02-6	Trans-1,3-Dichloropropene	0.5 U
79-01-6	Trichloroethene	-
124-48-1	Dibromochloromethane	0.9 U
79-00-5	1,1,2-Trichloroethane	0.3 U
71-43-2	Benzene	-
10061-01-5	cis-1,3-Dichloropropene	0.6 U
110-75-8	2-Chloroethylvinylether	1.5 U
75-25-2	Bromoform	0.3 U
108-10-1	4-Methyl-2-Pentanone	1.8 U
591-78-6	2-Hexanone	1.3 U
127-18-4	**Tetrachloroethene**	**1.3**
79-34-5	1,1,2,2-Tetrachloroethane	0.6 U
108-88-3	Toluene	-
108-90-7	Chlorobenzene	-
100-41-4	**Ethylbenzene**	**26**
100-42-5	Styrene	0.5 U
	Total Xylenes	**1.1 M**
1,1,2-Trichloro-1,2,2-trifluoroethane		2.0 U

Surrogate Recoveries

d8-Toluene	98.4%
Bromofluorobenzene	98.2%
d4-1,2-Dichloroethane	98.3%

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: Method Blank

Lab Sample ID: 1227MB
Sample Matrix: Soils/Sediments

QC Report No: 2413-Sweet Edwards
Project No: Chempro - Pier 91
Date Received: 12/20/88

Data Release Authorized: Susan D Olson
Report prepared 01/03/89 - MACB

Amount Analyzed: 5.0 gm [Equiv. Dry Weight]
Percent Moisture: NA
pH: NA

Instrument: FINN I
Date Analyzed: 12/27/88

CAS Number		ug/Kg
74-87-3	Chloromethane	3.8 U
74-83-9	Bromomethane	3.1 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	3.3 U
75-09-2	Methylene Chloride	3.9 U
67-64-1	Acetone	6.9 U
75-15-0	Carbon Disulfide	1.2 U
75-35-4	1,1-Dichloroethene	0.7 U
75-34-3	1,1-Dichloroethane	0.6 U
540-59-0	1,2-Dichloroethene (total)	0.8 U
67-66-3	Chloroform	1.1 U
107-06-2	1,2-Dichloroethane	0.5 U
78-93-3	2-Butanone	6.2 U
71-55-6	1,1,1-Trichloroethane	0.6 U
56-23-5	Carbon Tetrachloride	0.9 U
108-05-4	Vinyl Acetate	3.1 U
75-27-4	Bromodichloromethane	0.3 U
75-69-4	Trichlorofluoromethane	2.0 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	0.7 U
10061-01-5	cis-1,3-Dichloropropene	1.8 U
79-01-6	Trichloroethene	0.6 U
124-48-1	Dibromochloromethane	0.7 U
79-00-5	1,1,2-Trichloroethane	0.7 U
71-43-2	Benzene	1.0 U
10061-02-6	Trans-1,3-Dichloropropene	1.9 U
110-75-8	2-Chloroethylvinylether	2.7 U
75-25-2	Bromoform	2.5 U
108-10-1	4-Methyl-2-Pentanone	3.5 U
591-78-6	2-Hexanone	3.2 U
127-18-4	Tetrachloroethene	0.5 U
79-34-5	1,1,2,2-Tetrachloroethane	2.7 U
108-88-3	Toluene	0.8 U
108-90-7	Chlorobenzene	0.9 U
100-41-4	Ethylbenzene	0.8 U
100-42-5	Styrene	1.1 U
	Total Xylenes	1.3 U
1,1,2-Trichloro-1,2,2-trifluoroethane		2.0 U

Surrogate Recoveries

d8-Toluene	98.3%
Bromofluorobenzene	93.7%
d4-1,2-Dichloroethane	89.3%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: **TB3-0-5**
[Two vial composite]

Lab Sample ID: 2413A
Sample Matrix: Soils/Sediments

QC Report No: 2413-Sweet Edwards
Project No: Chempro - Pier 91
Date Received: 12/20/88

Data Release Authorized: Susan D Au
Report prepared 01/03/89 - MACB

Amount Analyzed: 5.04 gm [Dry Weight]
Percent Moisture: 7.6%
pH: 8.0

Instrument: FINN I
Date Analyzed: 12/27/88

CAS Number		ug/Kg
74-87-3	Chloromethane	3.8 U
74-83-9	Bromomethane	3.1 U
75-01-4	Vinyl Chloride	2.0 U
75-00-3	Chloroethane	3.3 U
75-09-2	Methylene Chloride	3.9 U
67-64-1	Acetone	6.8 U
75-15-0	Carbon Disulfide	1.2 U
75-35-4	1,1-Dichloroethene	0.7 U
75-34-3	1,1-Dichloroethane	0.6 U
540-59-0	1,2-Dichloroethene (total)	0.8 U
67-66-3	Chloroform	1.1 U
107-06-2	1,2-Dichloroethane	0.5 U
78-93-3	2-Butanone	6.2 U
71-55-6	1,1,1-Trichloroethane	0.6 U
56-23-5	Carbon Tetrachloride	0.9 U
108-05-4	Vinyl Acetate	3.1 U
75-27-4	Bromodichloromethane	0.3 U
75-69-4	Trichlorofluoromethane	2.0 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	0.7 U
10061-01-5	cis-1,3-Dichloropropene	1.8 U
79-01-6	Trichloroethene	0.6 U
124-48-1	Dibromochloromethane	0.7 U
79-00-5	1,1,2-Trichloroethane	0.7 U
71-43-2	Benzene	1.0 U
10061-02-6	Trans-1,3-Dichloropropene	1.9 U
110-75-8	2-Chloroethylvinylether	2.7 U
75-25-2	Bromoform	2.5 U
108-10-1	4-Methyl-2-Pentanone	3.5 U
591-78-6	2-Hexanone	3.2 U
127-18-4	Tetrachloroethene	0.5 U
79-34-5	1,1,2,2-Tetrachloroethane	2.7 U
108-88-3	**Toluene**	**0.7 J**
108-90-7	Chlorobenzene	0.9 U
100-41-4	Ethylbenzene	0.8 U
100-42-5	Styrene	1.1 U
	Total Xylenes	**2.1**
1,1,2-Trichloro-1,2,2-trifluoroethane		2.0 U

Surrogate Recoveries

d8-Toluene	97.7%
Bromofluorobenzene	93.4%
d4-1,2-Dichloroethane	88.5%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: TB3-2.5

Lab Sample ID: 2413B
Sample Matrix: Soils/Sediments

QC Report No: 2413-Sweet Edwards
Project No: Chempro - Pier 91
Date Received: 12/20/88

Data Release Authorized: Susan D Clan
Report prepared 01/03/89 - MAC:B

Amount Analyzed: 5.69 gm [Dry Weight]
Percent Moisture: 5.3%
pH: 7.6

Instrument: FINN I
Date Analyzed: 12/27/88

CAS Number		ug/Kg
74-87-3	Chloromethane	3.3 U
74-83-9	Bromomethane	2.7 U
75-01-4	Vinyl Chloride	1.8 U
75-00-3	Chloroethane	2.9 U
75-09-2	**Methylene Chloride**	**5.5**
67-64-1	Acetone	6.1 U
75-15-0	Carbon Disulfide	1.1 U
75-35-4	1,1-Dichloroethene	0.6 U
75-34-3	1,1-Dichloroethane	0.5 U
540-59-0	1,2-Dichloroethene (total)	0.7 U
67-66-3	Chloroform	1.0 U
107-06-2	1,2-Dichloroethane	0.4 U
78-93-3	2-Butanone	5.4 U
71-55-6	1,1,1-Trichloroethane	0.5 U
56-23-5	Carbon Tetrachloride	0.8 U
108-05-4	Vinyl Acetate	2.7 U
75-27-4	Bromodichloromethane	0.3 U
75-69-4	Trichlorofluoromethane	1.8 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	0.6 U
10061-01-5	cis-1,3-Dichloropropene	1.6 U
79-01-6	Trichloroethene	0.5 U
124-48-1	Dibromochloromethane	0.6 U
79-00-5	1,1,2-Trichloroethane	0.6 U
71-43-2	Benzene	0.9 U
10061-02-6	Trans-1,3-Dichloropropene	1.7 U
110-75-8	2-Chloroethylvinylether	2.4 U
75-25-2	Bromoform	2.2 U
108-10-1	4-Methyl-2-Pentanone	3.1 U
591-78-6	2-Hexanone	2.8 U
127-18-4	Tetrachloroethene	0.4 U
79-34-5	1,1,2,2-Tetrachloroethane	2.4 U
108-88-3	Toluene	0.7 U
108-90-7	Chlorobenzene	0.8 U
100-41-4	Ethylbenzene	0.7 U
100-42-5	Styrene	1.0 U
	Total Xylenes	1.6 U
1,1,2-Trichloro-1,2,2-trifluoroethane		1.8 U

Surrogate Recoveries

d8-Toluene	97.0%
Bromofluorobenzene	93.4%
d4-1,2-Dichloroethane	88.5%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-5490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: TB3-15

Lab Sample ID: 2413D
Sample Matrix: Soils/Sediments

QC Report No: 2413-Sweet Edwards
Project No: Chempro - Pier 91
Date Received: 12/20/88

Data Release Authorized: Susan Rao
Report prepared 01/03/89 - MAC:B

Amount Analyzed: 0.97 gm [Dry Weight]
Percent Moisture: 11.5%
pH: 7.9

Instrument: FINN I
Date Analyzed: 12/27/88

CAS Number		ug/Kg
74-87-3	Chloromethane	20 U
74-83-9	Bromomethane	16 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	17 U
75-09-2	**Methylene Chloride**	**12 J**
67-64-1	Acetone	36 U
75-15-0	Carbon Disulfide	6.2 U
75-35-4	1,1-Dichloroethene	3.6 U
75-34-3	1,1-Dichloroethane	3.1 U
540-59-0	1,2-Dichloroethene (total)	4.1 U
67-66-3	Chloroform	5.7 U
107-06-2	1,2-Dichloroethane	2.6 U
78-93-3	2-Butanone	32 U
71-55-6	1,1,1-Trichloroethane	3.1 U
56-23-5	Carbon Tetrachloride	4.6 U
108-05-4	Vinyl Acetate	16 U
75-27-4	Bromodichloromethane	1.5 U
75-69-4	Trichlorofluoromethane	10 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	3.6 U
10061-01-5	cis-1,3-Dichloropropene	9.3 U
79-01-6	Trichloroethene	3.1 U
124-48-1	Dibromochloromethane	3.6 U
79-00-5	1,1,2-Trichloroethane	3.6 U
71-43-2	Benzene	5.2 U
10061-02-6	Trans-1,3-Dichloropropene	9.8 U
110-75-8	2-Chloroethylvinylether	14 U
75-25-2	Bromoform	13 U
108-10-1	4-Methyl-2-Pentanone	18 U
591-78-6	2-Hexanone	17 U
127-18-4	Tetrachloroethene	2.6 U
79-34-5	1,1,2,2-Tetrachloroethane	14 U
108-88-3	**Toluene**	**97**
108-90-7	Chlorobenzene	4.6 U
100-41-4	**Ethylbenzene**	**310**
100-42-5	Styrene	5.7 U
	Total Xylenes	**870**
1,1,2-Trichloro-1,2,2-trifluoroethane		10 U

Surrogate Recoveries

d8-Toluene	87.8%
Bromofluorobenzene	112%
d4-1,2-Dichloroethane	95.1%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: TB3-20

Lab Sample ID: 2413E
Sample Matrix: Soils/Sediments

QC Report No: 2413-Sweet Edwards
Project No: Chempro - Pier 91
Date Received: 12/20/88

Data Release Authorized: Lisa D Olson
Report prepared 01/04/89 - MAC:B

Amount Analyzed: 0.90 gm [Dry Weight]
Percent Moisture: 19.3%
pH: 7.6

Instrument: FINN I
Date Analyzed: 12/27/88

CAS Number		ug/Kg
74-87-3	Chloromethane	21 U
74-83-9	Bromomethane	17 U
75-01-4	Vinyl Chloride	11 U
75-00-3	Chloroethane	18 U
75-09-2	**Methylene Chloride**	**11 J**
67-64-1	Acetone	38 U
75-15-0	Carbon Disulfide	6.7 U
75-35-4	1,1-Dichloroethene	3.9 U
75-34-3	1,1-Dichloroethane	3.3 U
540-59-0	1,2-Dichloroethene (total)	4.4 U
67-66-3	Chloroform	6.1 U
107-06-2	1,2-Dichloroethane	2.8 U
78-93-3	2-Butanone	34 U
71-55-6	1,1,1-Trichloroethane	3.3 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	17 U
75-27-4	Bromodichloromethane	1.7 U
75-69-4	Trichlorofluoromethane	11 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	3.9 U
10061-01-5	cis-1,3-Dichloropropene	10 U
79-01-6	Trichloroethene	3.3 U
124-48-1	Dibromochloromethane	3.9 U
79-00-5	1,1,2-Trichloroethane	3.9 U
71-43-2	Benzene	5.6 U
10061-02-6	Trans-1,3-Dichloropropene	11 U
110-75-8	2-Chloroethylvinylether	15 U
75-25-2	Bromoform	14 U
108-10-1	4-Methyl-2-Pentanone	19 U
591-78-6	2-Hexanone	18 U
127-18-4	Tetrachloroethene	2.8 U
79-34-5	1,1,2,2-Tetrachloroethane	15 U
108-88-3	**Toluene**	**300**
108-90-7	Chlorobenzene	5.0 U
100-41-4	**Ethylbenzene**	**170**
100-42-5	Styrene	6.1 U
	Total Xylenes	**450**
1,1,2-Trichloro-1,2,2-trifluoroethane		11 U

Surrogate Recoveries

d8-Toluene	93.5%
Bromofluorobenzene	94.9%
d4-1,2-Dichloroethane	88.3%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: SB 2A

Lab Sample ID: 2413HM1
Sample Matrix: Soils/Sediments

Data Release Authorized: Susan D Rasch
Report Prepared: 01/04/89 - 09:02

QC Report No: 2413-Sweet Edwards
Project No: Chemparo - Pier 91
Date Received: 12/20/88

Amount Analyzed: 0.0079 gm [Equivalent Dry Weight]
Percent Moisture: 21.4%
pH: 7.7

Instrument: FINN 1
Date Analyzed: 12/27/88

CAS Number		ug/Kg
74-87-3	Chloromethane	2400 U
74-83-9	Bromomethane	2000 U
75-01-4	Vinyl Chloride	1300 U
75-00-3	Chloroethane	2100 U
75-09-2	**Methylene Chloride**	**2100**
67-64-1	Acetone	4400 U
75-15-0	Carbon Disulfide	760 U
75-35-4	1,1-Dichloroethene	440 U
75-34-3	**1,1-Dichloroethane**	**1300**
540-59-0	**1,2-Dichloroethene (total)**	**5800**
67-66-3	Chloroform	700 U
107-06-2	1,2-Dichloroethane	320 U
78-93-3	2-Butanone	3900 U
71-55-6	1,1,1-Trichloroethane	380 U
56-23-5	Carbon Tetrachloride	570 U
108-05-4	Vinyl Acetate	3000 U
75-27-4	Bromodichloromethane	190 U
75-69-4	Trichlorofluoromethane	1300 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	440 U
10061-01-5	cis-1,3-Dichloropropene	1100 U
79-01-6	**Trichloroethene**	**5400**
124-48-1	Dibromochloromethane	440 U
79-00-5	1,1,2-Trichloroethane	440 U
71-43-2	**Benzene**	**15000**
10061-02-6	Trans-1,3-Dichloropropene	1200 U
110-75-8	2-Chloroethylvinylether	1700 U
75-25-2	Bromoform	1600 U
108-10-1	4-Methyl-2-Pentanone	2200 U
591-78-6	2-Hexanone	2000 U
127-18-4	**Tetrachloroethene**	**12000**
79-34-5	1,1,2,2-Tetrachloroethane	1700 U
108-88-3	**Toluene**	**83000**
108-90-7	Chlorobenzene	570 U
100-41-4	**Ethylbenzene**	**37000**
100-42-5	Styrene	700 U
	Total Xylenes	**360000 K**
1,1,2-Trichloro-1,2,2-trifluoroethane		**6500**

Surrogate Recoveries

d8-Toluene	86.7%
Bromofluorobenzene	114%
d4-1,2-Dichloroethane	89.5%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NA	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: SB 2A Rerun

Lab Sample ID: 2413HM2
Sample Matrix: Soils/Sediments

QC Report No: 2413-Sweet Edwards
Project No: Chemparo - Pier 91
Date Received: 12/20/88

Data Release Authorized: Susan D. Olson
Report prepared 01/04/89 - MACB

Amount Analyzed: 0.0020 gm [Equivalent Dry Weight]
Percent Moisture: 21.4%
pH: 7.7

Instrument: FINN I
Date Analyzed: 12/27/88

CAS Number		ug/Kg
74-87-3	Chloromethane	9500 U
74-83-9	Bromomethane	7800 U
75-01-4	Vinyl Chloride	5000 U
75-00-3	Chloroethane	8300 U
75-09-2	Methylene Chloride	9800 U
67-64-1	Acetone	17000 U
75-15-0	Carbon Disulfide	3000 U
75-35-4	1,1-Dichloroethene	1800 U
75-34-3	1,1-Dichloroethane	1500 U
540-59-0	**1,2-Dichloroethene (total)**	**9400**
67-66-3	Chloroform	2800 U
107-06-2	1,2-Dichloroethane	1300 U
78-93-3	2-Butanone	16000 U
71-55-6	1,1,1-Trichloroethane	1500 U
56-23-5	Carbon Tetrachloride	2300 U
108-05-4	Vinyl Acetate	7800 U
75-27-4	Bromodichloromethane	750 U
75-69-4	Trichlorofluoromethane	5000 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	1800 U
10061-01-5	cis-1,3-Dichloropropene	4500 U
79-01-6	**Trichloroethene**	**6400**
124-48-1	Dibromochloromethane	1800 U
79-00-5	1,1,2-Trichloroethane	1800 U
71-43-2	**Benzene**	**16000**
10061-02-6	Trans-1,3-Dichloropropene	4800 U
110-75-8	2-Chloroethylvinylether	6800 U
75-25-2	Bromoform	6300 U
108-10-1	4-Methyl-2-Pentanone	8800 U
591-78-6	2-Hexanone	8000 U
127-18-4	**Tetrachloroethene**	**12000**
79-34-5	1,1,2,2-Tetrachloroethane	6800 U
108-88-3	**Toluene**	**100000**
108-90-7	Chlorobenzene	2300 U
100-41-4	**Ethylbenzene**	**39000**
100-42-5	Styrene	2800 U
	Total Xylenes	**480000**
1,1,2-Trichloro-1,2,2-trifluoroethane		**6300**

Surrogate Recoveries

d8-Toluene	94.0%
Bromofluorobenzene	95.4%
d4-1,2-Dichloroethane	90.8%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8240

Sample No: TB3-6-10
[Four vial composite]

Lab Sample ID: 2413C
Sample Matrix: Soils/Sediments

QC Report No: 2413-Sweet Edwards
Project No: Chempro - Pier 91
Date Received: 12/20/88

Data Release Authorized: Susan D. Rose
Report prepared 01/04/89 - MACB

Amount Analyzed: 1.17 gm [Dry Weight]
Percent Moisture: 16.5%
pH: 8.0

Instrument: FINN I
Date Analyzed: 12/27/88

CAS Number		ug/Kg
74-87-3	Chloromethane	16 U
74-83-9	Bromomethane	13 U
75-01-4	Vinyl Chloride	8.5 U
75-00-3	Chloroethane	14 U
75-09-2	Methylene Chloride	17 U
67-64-1	Acetone	30 U
75-15-0	Carbon Disulfide	5.1 U
75-35-4	1,1-Dichloroethene	3.0 U
75-34-3	1,1-Dichloroethane	2.6 U
540-59-0	1,2-Dichloroethene (total)	3.4 U
67-66-3	Chloroform	4.7 U
107-06-2	1,2-Dichloroethane	2.1 U
78-93-3	2-Butanone	27 U
71-55-6	1,1,1-Trichloroethane	2.6 U
56-23-5	Carbon Tetrachloride	3.8 U
108-05-4	Vinyl Acetate	13 U
75-27-4	Bromodichloromethane	1.3 U
75-69-4	Trichlorofluoromethane	8.5 U

CAS Number		ug/Kg
78-87-5	1,2-Dichloropropane	3.0 U
10061-01-5	cis-1,3-Dichloropropene	7.7 U
79-01-6	Trichloroethene	2.6 U
124-48-1	Dibromochloromethane	3.0 U
79-00-5	1,1,2-Trichloroethane	3.0 U
71-43-2	Benzene	4.3 U
10061-02-6	Trans-1,3-Dichloropropene	8.1 U
110-75-8	2-Chloroethylvinylether	12 U
75-25-2	Bromoform	11 U
108-10-1	4-Methyl-2-Pentanone	15 U
591-78-6	2-Hexanone	14 U
127-18-4	Tetrachloroethene	2.1 U
79-34-5	1,1,2,2-Tetrachloroethane	12 U
108-88-3	Toluene	3.4 U
108-90-7	Chlorobenzene	3.8 U
100-41-4	**Ethylbenzene**	**27**
100-42-5	Styrene	4.7 U
	Total Xylenes	7.7 U
1,1,2-Trichloro-1,2,2-trifluoroethane		8.5 U

Surrogate Recoveries

d8-Toluene	94.0%
Bromofluorobenzene	102%
d4-1,2-Dichloroethane	90.8%

*Surrogate recoveries indicate the validity of a given analysis

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
NR	Analysis not required
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL RESOURCES INCORPORATED

Analytical Chemists & Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS - METHOD 8240

Sample No: Method Blank

Lab Sample ID: MB1222
Sample Matrix: Water

QC Report No: 2413-Sweet Edwards
Project No: Pier 91
Date Received: 12/20/88

Data Release Authorized: Susan Ran
Report prepared 01/05/89 - MHCB

Instrument: FINN 3
Date Analyzed: 12/22/88

Amount Analyzed: 5 mls
Conc/Dil: 1 to 1

CAS Number		ug/L
74-87-3	Chloromethane	2.9 U
74-83-9	Bromomethane	0.9 U
75-01-4	Vinyl Chloride	1.1 U
75-00-3	Chloroethane	0.9 U
75-09-2	**Methylene Chloride**	**0.6 J**
67-64-1	Acetone	0.6 U
75-15-0	Carbon Disulfide	2.0 U
75-35-4	1,1-Dichloroethene	1.3 U
75-34-3	1,1-Dichloroethane	1.1 U
540-59-0	1,2-Dichloroethene (total)	1.3 U
67-66-3	Chloroform	0.9 U
107-06-2	1,2-Dichloroethane	0.6 U
78-93-3	2-Butanone	1.0 U
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	0.5 U
108-05-4	Vinyl Acetate	1.7 U
75-27-4	Bromodichloromethane	0.2 U
75-69-4	Trichlorofluoromethane	2.0 U

CAS Number		ug/L
78-87-5	1,2-Dichloropropane	0.6 U
10061-02-6	Trans-1,3-Dichloropropene	0.5 U
79-01-6	Trichloroethene	0.8 U
124-48-1	Dibromochloromethane	0.9 U
79-00-5	1,1,2-Trichloroethane	0.3 U
71-43-2	Benzene	0.4 U
10061-01-5	cis-1,3-Dichloropropene	0.6 U
110-75-8	2-Chloroethylvinylether	1.5 U
75-25-2	Bromoform	0.3 U
108-10-1	4-Methyl-2-Pentanone	1.8 U
591-78-6	2-Hexanone	1.3 U
127-18-4	Tetrachloroethene	0.6 U
79-34-5	1,1,2,2-Tetrachloroethane	0.6 U
108-88-3	Toluene	0.6 U
108-90-7	Chlorobenzene	0.6 U
100-41-4	Ethylbenzene	1.0 U
100-42-5	Styrene	0.5 U
	Total Xylenes	1.5 U
1,1,2-Trichloro-1,2,2-trifluoroethane		2.0 U

Surrogate Recoveries

d8-Toluene	99.0%
Bromofluorobenzene	98.5%
d4-1,2-Dichloroethane	93.5%

Data Reporting Qualifiers

Value	If the result is a value greater than or equal to the detection limit, report the value.
U	Indicates compound was analyzed for but not detected at the given detection limit.
J	Indicates an estimated value when result is less than specified detection limit.
B	This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
K	This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run
M	Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters

ANALYTICAL RESOURCES INCORPORATED

Analytical Chemists & Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS - METHOD 8240

Sample No: TB3 B

Lab Sample ID: 24136
Sample Matrix: Waters

QC Report No: 2413-Sweet Edwards
Project No: Pier 91
Date Received: 12/20/88

Data Release Authorized: Susan D Rose
Report prepared 01/05/89 - MHCS

Instrument: FINN 3
Date Analyzed: 12/22/88

Amount Analyzed: 5 mls
Conc/Dil: 1 to 1

CAS Number		ug/L
74-87-3	Chloromethane	2.9 U
74-83-9	Bromomethane	0.9 U
75-01-4	**Vinyl Chloride**	**4.6**
75-00-3	Chloroethane	0.9 U
75-09-2	**Methylene Chloride**	**1.9 B**
67-64-1	**Acetone**	**16**
75-15-0	Carbon Disulfide	2.0 U
75-35-4	1,1-Dichloroethene	1.3 U
75-34-3	**1,1-Dichloroethane**	**21**
540-59-0	**1,2-Dichloroethene (total)**	**2.8**
67-66-3	**Chloroform**	**1.2**
107-06-2	**1,2-Dichloroethane**	**1.1**
78-93-3	**2-Butanone**	**6.5**
71-55-6	1,1,1-Trichloroethane	1.0 U
56-23-5	Carbon Tetrachloride	0.5 U
108-05-4	Vinyl Acetate	1.7 U
75-27-4	Bromodichloromethane	0.2 U
75-69-4	Trichlorofluoromethane	2.0 U

CAS Number		ug/L
78-87-5	1,2-Dichloropropane	0.6 U
10061-02-6	Trans-1,3-Dichloropropene	0.5 U
79-01-6	**Trichloroethene**	**1.5**
124-48-1	Dibromochloromethane	0.9 U
79-00-5	1,1,2-Trichloroethane	0.3 U
71-43-2	**Benzene**	**1.5**
10061-01-5	cis-1,3-Dichloropropene	0.6 U
110-75-8	2-Chloroethylvinylether	1.5 U
75-25-2	Bromoform	0.3 U
108-10-1	4-Methyl-2-Pentanone	1.8 U
591-78-6	2-Hexanone	1.3 U
127-18-4	**Tetrachloroethene**	**1.3**
79-34-5	1,1,2,2-Tetrachloroethane	0.6 U
108-88-3	**Toluene**	**3.2**
108-90-7	Chlorobenzene	0.6 U
100-41-4	**Ethylbenzene**	**28**
100-42-5	Styrene	0.5 U
	Total Xylenes	**1.1 M**
1,1,2-Trichloro-1,2,2-trifluoroethane		2.0 U

Surrogate Recoveries

d8-Toluene	99.1%
Bromofluorobenzene	101%
d4-1,2-Dichloroethane	91.6%

Data Reporting Qualifiers

Value — If the result is a value greater than or equal to the detection limit, report the value.

U — Indicates compound was analyzed for but not detected at the given detection limit.

J — Indicates an estimated value when result is less than specified detection limit.

B — This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.

K — This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.

M — Indicates an estimated value of analyte found and confirmed by analyst but with low spectral match parameters.

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: TB3 0-5

Lab Sample ID: 2413A
Sample Matrix: Soil/Sediments

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received: 12/20/88

Date Release Authorized: [signature]
Report Revised: 03/21/89 MAC: A

Dry weight extracted (gm): 35.57
Final Volume: 1.0 ml
Percent Moisture: 7.59%
pH: 8.01
Conc/Dilution Factor: 1 to 2
Total Dilution: 1 to 4

Date Extracted: 12/29/88
Date Analyzed: 01/09/89
GPC Clean-up: YES (1 of 2)
Instrument ID: FINN IV

CAS Number		µg/Kg
108-95-2	Phenol	110 U
111-44-4	bis(2-Chloroethyl)Ether	110 U
95-57-8	2-Chlorophenol	110 U
541-73-1	1,3-Dichlorobenzene	110 U
106-46-7	1,4-Dichlorobenzene	110 U
100-51-6	Benzyl Alcohol	560 U
95-50-1	1,2-Dichlorobenzene	110 U
95-48-7	2-Methylphenol	110 U
39638-32-9	bis(2-chloroisopropyl)Ether	110 U
106-44-5	4-Methylphenol	110 U
621-64-7	N-Nitroso-Di-n-Propylamine	110 U
67-72-1	Hexachloroethane	220 U
98-95-3	Nitrobenzene	110 U
78-59-1	Isophorone	110 U
88-75-5	2-Nitrophenol	560 U
105-67-9	2,4-Dimethylphenol	220 U
65-85-0	Benzoic Acid	1100 U
111-91-1	bis(2-Chloroethoxy)Methane	110 U
120-83-2	2,4-Dichlorophenol	340 U
120-82-1	1,2,4-Trichlorobenzene	110 U
91-20-3	Naphthalene	110 U
106-47-8	4-Chloroaniline	340 U
87-68-3	Hexachlorobutadiene	220 U
59-50-7	4-Chloro-3-Methylphenol	220 U
91-57-6	2-Methylnaphthalene	110 U
77-47-4	Hexachlorocyclopentadiene	560 U
88-06-2	2,4,6-Trichlorophenol	560 U
95-95-4	2,4,5-Trichlorophenol	560 U
91-58-7	2-Chloronaphthalene	110 U
88-74-4	2-Nitroaniline	560 U
131-11-3	Dimethyl Phthalate	110 U
208-96-8	Acenaphthylene	110 U
99-09-2	3-Nitroaniline	560 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	110 U
51-28-5	2,4-Dinitrophenol	1100 U
100-02-7	4-Nitrophenol	560 U
132-64-9	Dibenzofuran	110 U
121-14-2	2,4-Dinitrotoluene	560 U
606-20-2	2,6-Dinitrotoluene	560 U
84-66-2	Diethylphthalate	110 U
7005-72-3	4-Chlorophenyl-phenylether	110 U
86-73-7	Fluorene	110 U
100-01-6	4-Nitroaniline	560 U
534-52-1	4,6-Dinitro-2-Methylphenol	1100 U
86-30-6	N-Nitrosodiphenylamine(1)	110 U
101-55-3	4-Bromophenyl-phenylether	110 U
118-74-1	Hexachlorobenzene	110 U
87-86-5	Pentachlorophenol	560 U
85-01-8	Phenanthrene	110 U
120-12-7	Anthracene	110 U
84-74-2	Di-n-Butylphthalate	110 U
206-44-0	**Fluoranthene**	**36 J**
129-00-0	**Pyrene**	**76 J**
85-68-7	Butylbenzylphthalate	110 U
91-94-1	3,3'-Dichlorobenzidine	560 U
56-55-3	Benzo(a)Anthracene	110 U
117-81-7	bis(2-Ethylhexyl)Phthalate	110 U
218-01-9	Chrysene	110 U
117-84-0	Di-n-Octyl Phthalate	110 U
205-99-2	Benzo(b)Fluoranthene	110 U
207-08-9	Benzo(k)Fluoranthene	110 U
50-32-8	Benzo(a)Pyrene	110 U
193-39-5	Indeno(1,2,3-cd)Pyrene	110 U
53-70-3	Dibenz(a,h)Anthracene	110 U
191-24-2	Benzo(ghi)Perylene	110 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	75.0%
2-Fluorobiphenyl	86.4%
d14-p-Terphenyl	124%

***Acid surrogate recoveries**

d5-Phenol	78.5%
2-Fluorophenol	78.0%
2,4,6-Tribromophenol	75.0%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: TB3 6-10

Lab Sample ID: 2413C
Sample Matrix: Soil/Sediments

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received: 12/20/88

Date Release Authorized: Brian N. Beker
Report Revised 03/21/89 MAC: A

Dry weight extracted (gm): 35.70
Final Volume: 1.0 ml
Percent Moisture: 16.48%
pH: 7.96
Conc/Dilution Factor: 1 to 1
Total Dilution: 1 to 2

Date Extracted: 12/29/88
Date Analyzed: 01/10/89
GPC Clean-up: YES (1 of 2)
Instrument ID: FINN IV

CAS Number		µg/Kg
108-95-2	Phenol	56 U
111-44-4	bis(2-Chloroethyl)Ether	56 U
95-57-8	2-Chlorophenol	56 U
541-73-1	1,3-Dichlorobenzene	56 U
106-46-7	1,4-Dichlorobenzene	56 U
100-51-6	Benzyl Alcohol	280 U
95-50-1	1,2-Dichlorobenzene	56 U
95-48-7	2-Methylphenol	56 U
39638-32-9	bis(2-chloroisopropyl)Ether	56 U
106-44-5	4-Methylphenol	56 U
621-64-7	N-Nitroso-Di-n-Propylamine	56 U
67-72-1	Hexachloroethane	110 U
98-95-3	Nitrobenzene	56 U
78-59-1	Isophorone	56 U
88-75-5	2-Nitrophenol	280 U
105-67-9	2,4-Dimethylphenol	110 U
65-85-0	Benzoic Acid	560 U
111-91-1	bis(2-Chloroethoxy)Methane	56 U
120-83-2	2,4-Dichlorophenol	168 U
120-82-1	1,2,4-Trichlorobenzene	56 U
91-20-3	Naphthalene	56 U
106-47-8	4-Chloroaniline	168 U
87-68-3	Hexachlorobutadiene	110 U
59-50-7	4-Chloro-3-Methylphenol	110 U
91-57-6	2-Methylnaphthalene	56 U
77-47-4	Hexachlorocyclopentadiene	280 U
88-06-2	2,4,6-Trichlorophenol	280 U
95-95-4	2,4,5-Trichlorophenol	280 U
91-58-7	2-Chloronaphthalene	56 U
88-74-4	2-Nitroaniline	280 U
131-11-3	Dimethyl Phthalate	56 U
208-96-8	Acenaphthylene	56 U
99-09-2	3-Nitroaniline	280 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	56 U
51-28-5	2,4-Dinitrophenol	560 U
100-02-7	4-Nitrophenol	280 U
132-64-9	Dibenzofuran	56 U
121-14-2	2,4-Dinitrotoluene	280 U
606-20-2	2,6-Dinitrotoluene	280 U
84-66-2	Diethylphthalate	56 U
7005-72-3	4-Chlorophenyl-phenylether	56 U
86-73-7	**Fluorene**	**99 M**
100-01-6	4-Nitroaniline	280 U
534-52-1	4,6-Dinitro-2-Methylphenol	560 U
86-30-6	N-Nitrosodiphenylamine(1)	56 U
101-55-3	4-Bromophenyl-phenylether	56 U
118-74-1	Hexachlorobenzene	56 U
87-86-5	Pentachlorophenol	280 U
85-01-8	Phenanthrene	56 U
120-12-7	Anthracene	56 U
84-74-2	Di-n-Butylphthalate	56 U
206-44-0	**Fluoranthene**	**19 J**
129-00-0	**Pyrene**	**18 J**
85-68-7	Butylbenzylphthalate	56 U
91-94-1	3,3'-Dichlorobenzidine	280 U
56-55-3	Benzo(a)Anthracene	56 U
117-81-7	**bis(2-Ethylhexyl)Phthalate**	**61 J**
218-01-9	**Chrysene**	**25 J**
117-84-0	Di-n-Octyl Phthalate	56 U
205-99-2	Benzo(b)Fluoranthene	56 U
207-08-9	Benzo(k)Fluoranthene	56 U
50-32-8	Benzo(a)Pyrene	56 U
193-39-5	Indeno(1,2,3-cd)Pyrene	56 U
53-70-3	Dibenz(a,h)Anthracene	56 U
191-24-2	Benzo(ghi)Perylene	56 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	82.2%
2-Fluorobiphenyl	87.4%
d14-p-Terphenyl	108%

***Acid surrogate recoveries**

d5-Phenol	85.3%
2-Fluorophenol	81.0%
2,4,6-Tribromophenol	78.8%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: TB3 2.5

Lab Sample ID: 2413B
Sample Matrix: Soil/Sediments

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received: 12/20/88

Date Release Authorized: Alan N. Schee
Report Revised: 03/21/89 MAC: A

Dry weight extracted (gm): 37.37
Final Volume: 1.0 ml
Percent Moisture: 5.26%
pH: 7.56
Conc/Dilution Factor: 1 to 2
Total Dilution: 1 to 4

Date Extracted: 12/29/88
Date Analyzed: 01/09/89
GPC Clean-up: YES (1 of 2)
Instrument ID: FINN IV

CAS Number		µg/Kg
108-95-2	Phenol	110 U
111-44-4	bis(2-Chloroethyl)Ether	110 U
95-57-8	2-Chlorophenol	110 U
541-73-1	1,3-Dichlorobenzene	110 U
106-46-7	1,4-Dichlorobenzene	110 U
100-51-6	Benzyl Alcohol	540 U
95-50-1	1,2-Dichlorobenzene	110 U
95-48-7	2-Methylphenol	110 U
39638-32-9	bis(2-chloroisopropyl)Ether	110 U
106-44-5	4-Methylphenol	110 U
621-64-7	N-Nitroso-Di-n-Propylamine	110 U
67-72-1	Hexachloroethane	210 U
98-95-3	Nitrobenzene	110 U
78-59-1	Isophorone	110 U
88-75-5	2-Nitrophenol	540 U
105-67-9	2,4-Dimethylphenol	210 U
65-85-0	Benzoic Acid	1100 U
111-91-1	bis(2-Chloroethoxy)Methane	110 U
120-83-2	2,4-Dichlorophenol	320 U
120-82-1	1,2,4-Trichlorobenzene	110 U
91-20-3	**Naphthalene**	**100 J**
106-47-8	4-Chloroaniline	320 U
87-68-3	Hexachlorobutadiene	210 U
59-50-7	4-Chloro-3-Methylphenol	210 U
91-57-6	**2-Methylnaphthalene**	**240**
77-47-4	Hexachlorocyclopentadiene	540 U
88-06-2	2,4,6-Trichlorophenol	540 U
95-95-4	2,4,5-Trichlorophenol	540 U
91-58-7	2-Chloronaphthalene	110 U
88-74-4	2-Nitroaniline	540 U
131-11-3	Dimethyl Phthalate	110 U
208-96-8	Acenaphthylene	110 U
99-09-2	3-Nitroaniline	540 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	110 U
51-28-5	2,4-Dinitrophenol	1100 U
100-02-7	4-Nitrophenol	540 U
132-64-9	Dibenzofuran	110 U
121-14-2	2,4-Dinitrotoluene	540 U
606-20-2	2,6-Dinitrotoluene	540 U
84-66-2	Diethylphthalate	110 U
7005-72-3	4-Chlorophenyl-phenylether	110 U
86-73-7	Fluorene	110 U
100-01-6	4-Nitroaniline	540 U
534-52-1	4,6-Dinitro-2-Methylphenol	1100 U
86-30-6	N-Nitrosodiphenylamine(1)	110 U
101-55-3	4-Bromophenyl-phenylether	110 U
118-74-1	Hexachlorobenzene	110 U
87-86-5	Pentachlorophenol	540 U
85-01-8	**Phenanthrene**	**150**
120-12-7	**Anthracene**	**26 J**
84-74-2	Di-n-Butylphthalate	110 U
206-44-0	**Fluoranthene**	**99 J**
129-00-0	**Pyrene**	**190**
85-68-7	Butylbenzylphthalate	110 U
91-94-1	3,3'-Dichlorobenzidine	540 U
56-55-3	**Benzo(a)Anthracene**	**91 J**
117-81-7	**bis(2-Ethylhexyl)Phthalate**	**340**
218-01-9	**Chrysene**	**120**
117-84-0	Di-n-Octyl Phthalate	110 U
205-99-2	**Benzo(b)Fluoranthene &**	
207-08-9	**Benzo(k)Fluoranthene**	**140**
50-32-8	**Benzo(a)Pyrene**	**61 J**
193-39-5	**Indeno(1,2,3-cd)Pyrene**	**47 J**
53-70-3	**Dibenz(a,h)Anthracene**	**52**
191-24-2	**Benzo(ghi)Perylene**	**56 J**

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	73.8%
2-Fluorobiphenyl	88.6%
d14-p-Terphenyl	111%

***Acid surrogate recoveries**

d5-Phenol	79.1%
2-Fluorophenol	77.2%
2,4,6-Tribromophenol	85.1%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: TB3 15

Lab Sample ID: 2413D
Sample Matrix: Soil/Sediments

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received: 12/20/88

Date Release Authorized: Brian N. Abbe
Report Revised: 03/21/89 MAC: A

Dry weight extracted (gm): 36.73
Final Volume: 1.0 ml
Percent Moisture: 11.47%
pH: 7.86
Conc/Dilution Factor: 1 to 1
Total Dilution: 1 to 2

Date Extracted: 12/29/88
Date Analyzed: 01/10/89
GPC Clean-up: YES (1 of 2)
Instrument ID: FINN IV

CAS Number		µg/Kg
108-95-2	Phenol	55 U
111-44-4	bis(2-Chloroethyl)Ether	55 U
95-57-8	2-Chlorophenol	55 U
541-73-1	1,3-Dichlorobenzene	55 U
106-46-7	1,4-Dichlorobenzene	55 U
100-51-6	Benzyl Alcohol	270 U
95-50-1	1,2-Dichlorobenzene	55 U
95-48-7	2-Methylphenol	55 U
39638-32-9	bis(2-chloroisopropyl)Ether	55 U
106-44-5	4-Methylphenol	55 U
621-64-7	N-Nitroso-Di-n-Propylamine	55 U
67-72-1	Hexachloroethane	110 U
98-95-3	Nitrobenzene	55 U
78-59-1	Isophorone	55 U
88-75-5	2-Nitrophenol	270 U
105-67-9	2,4-Dimethylphenol	110 U
65-85-0	Benzoic Acid	540 U
111-91-1	bis(2-Chloroethoxy)Methane	55 U
120-83-2	2,4-Dichlorophenol	163 U
120-82-1	1,2,4-Trichlorobenzene	55 U
91-20-3	Naphthalene	55 U
106-47-8	4-Chloroaniline	163 U
87-68-3	Hexachlorobutadiene	110 U
59-50-7	4-Chloro-3-Methylphenol	110 U
91-57-6	2-Methylnaphthalene	55 U
77-47-4	Hexachlorocyclopentadiene	270 U
88-06-2	2,4,6-Trichlorophenol	270 U
95-95-4	2,4,5-Trichlorophenol	270 U
91-58-7	2-Chloronaphthalene	55 U
88-74-4	2-Nitroaniline	270 U
131-11-3	Dimethyl Phthalate	55 U
208-96-8	Acenaphthylene	55 U
99-09-2	3-Nitroaniline	270 U

CAS Number		µg/Kg
83-32-9	**Acenaphthene**	**24 M**
51-28-5	2,4-Dinitrophenol	540 U
100-02-7	4-Nitrophenol	270 U
132-64-9	Dibenzofuran	55 U
121-14-2	2,4-Dinitrotoluene	270 U
606-20-2	2,6-Dinitrotoluene	270 U
84-66-2	Diethylphthalate	55 U
7005-72-3	4-Chlorophenyl-phenylether	55 U
86-73-7	**Fluorene**	**29 J**
100-01-6	4-Nitroaniline	270 U
534-52-1	4,6-Dinitro-2-Methylphenol	540 U
86-30-6	N-Nitrosodiphenylamine(1)	55 U
101-55-3	4-Bromophenyl-phenylether	55 U
118-74-1	Hexachlorobenzene	55 U
87-86-5	Pentachlorophenol	270 U
85-01-8	**Phenanthrene**	**21 J**
120-12-7	Anthracene	55 U
84-74-2	Di-n-Butylphthalate	55 U
206-44-0	**Fluoranthene**	**14 J**
129-00-0	**Pyrene**	**15 J**
85-68-7	Butylbenzylphthalate	55 U
91-94-1	3,3'-Dichlorobenzidine	270 U
56-55-3	Benzo(a)Anthracene	55 U
117-81-7	**bis(2-Ethylhexyl)Phthalate**	**77**
218-01-9	Chrysene	55 U
117-84-0	Di-n-Octyl Phthalate	55 U
205-99-2	Benzo(b)Fluoranthene	55 U
207-08-9	Benzo(k)Fluoranthene	55 U
50-32-8	Benzo(a)Pyrene	55 U
193-39-5	Indeno(1,2,3-cd)Pyrene	55 U
53-70-3	Dibenz(a,h)Anthracene	55 U
191-24-2	Benzo(ghi)Perylene	55 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	102%
2-Fluorobiphenyl	96.1%
d14-o-Terphenyl	122%

***Acid surrogate recoveries**

d5-Phenol	95.5%
2-Fluorophenol	93.8%
2,4,6-Tribromophenol	93.2%

ANALYTICAL
RESOURCES
INCORPORATED

Analytical
Chemists &
Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: TB3 20

Lab Sample ID: 2413E
Sample Matrix: Soil/Sediments

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received: 12/20/88

Date Release Authorized: Brian N. Gibbs
Report Revised: 03/21/89 MAC: A

Dry weight extracted (gm): 28.51
Final Volume: 1.0 ml
Percent Moisture: 19.26%
pH: 7.56
Conc/Dilution Factor: 1 to 1
Total Dilution: 1 to 2

Date Extracted: 12/29/88
Date Analyzed: 01/10/89
GPC Clean-up: YES (1 of 2)
Instrument ID: FINN IV

CAS Number		µg/Kg
108-95-2	Phenol	70 U
111-44-4	bis(2-Chloroethyl)Ether	70 U
95-57-8	2-Chlorophenol	70 U
541-73-1	1,3-Dichlorobenzene	70 U
106-46-7	1,4-Dichlorobenzene	70 U
100-51-6	Benzyl Alcohol	350 U
95-50-1	1,2-Dichlorobenzene	70 U
95-48-7	2-Methylphenol	70 U
39638-32-9	bis(2-chloroisopropyl)Ether	70 U
106-44-5	4-Methylphenol	70 U
621-64-7	N-Nitroso-Di-n-Propylamine	70 U
67-72-1	Hexachloroethane	140 U
98-95-3	Nitrobenzene	70 U
78-59-1	Isophorone	70 U
88-75-5	2-Nitrophenol	350 U
105-67-9	2,4-Dimethylphenol	140 U
65-85-0	Benzoic Acid	700 U
111-91-1	bis(2-Chloroethoxy)Methane	70 U
120-83-2	2,4-Dichlorophenol	211 U
120-82-1	1,2,4-Trichlorobenzene	70 U
91-20-3	Naphthalene	70 U
106-47-8	4-Chloroaniline	211 U
87-68-3	Hexachlorobutadiene	140 U
59-50-7	4-Chloro-3-Methylphenol	140 U
91-57-6	2-Methylnaphthalene	70 U
77-47-4	Hexachlorocyclopentadiene	350 U
88-06-2	2,4,6-Trichlorophenol	350 U
95-95-4	2,4,5-Trichlorophenol	350 U
91-58-7	2-Chloronaphthalene	70 U
88-74-4	2-Nitroaniline	350 U
131-11-3	Dimethyl Phthalate	70 U
208-96-8	Acenaphthylene	70 U
99-09-2	3-Nitroaniline	350 U

CAS Number		µg/Kg
83-32-9	Acenaphthene	70 U
51-28-5	2,4-Dinitrophenol	700 U
100-02-7	4-Nitrophenol	350 U
132-64-9	Dibenzofuran	70 U
121-14-2	2,4-Dinitrotoluene	350 U
606-20-2	2,6-Dinitrotoluene	350 U
84-66-2	Diethylphthalate	70 U
7005-72-3	4-Chlorophenyl-phenylether	70 U
86-73-7	**Fluorene**	**14 M**
100-01-6	4-Nitroaniline	350 U
534-52-1	4,6-Dinitro-2-Methylphenol	700 U
86-30-6	N-Nitrosodiphenylamine(1)	70 U
101-55-3	4-Bromophenyl-phenylether	70 U
118-74-1	Hexachlorobenzene	70 U
87-86-5	Pentachlorophenol	350 U
85-01-8	**Phenanthrene**	**21 J**
120-12-7	Anthracene	70 U
84-74-2	Di-n-Butylphthalate	70 U
206-44-0	Fluoranthene	70 U
129-00-0	Pyrene	70 U
85-68-7	Butylbenzylphthalate	70 U
91-94-1	3,3'-Dichlorobenzidine	350 U
56-55-3	Benzo(a)Anthracene	70 U
117-81-7	bis(2-Ethylhexyl)Phthalate	70 U
218-01-9	Chrysene	70 U
117-84-0	Di-n-Octyl Phthalate	70 U
205-99-2	Benzo(b)Fluoranthene	70 U
207-08-9	Benzo(k)Fluoranthene	70 U
50-32-8	Benzo(a)Pyrene	70 U
193-39-5	Indeno(1,2,3-cd)Pyrene	70 U
53-70-3	Dibenz(a,h)Anthracene	70 U
191-24-2	Benzo(ghi)Perylene	70 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	98.3%
2-Fluorobiphenyl	96.9%
d14-p-Terphenyl	123%

***Acid surrogate recoveries**

d5-Phenol	99.7%
2-Fluorophenol	96.2%
2,4,6-Tribromophenol	90.0%

ANALYTICAL RESOURCES INCORPORATED

Analytical Chemists & Consultants

333 Ninth Ave. North
Seattle, Wa 98109-5187
(206) 621-6490

ORGANICS ANALYSIS DATA SHEET - METHOD 8270

Sample No: Method Blank

Lab Sample ID: 2413MB
Sample Matrix: Soil/Sediments

QC Report No: 2413 - Sweet Edwards
Project: S940702
Pier 91
Date Received: 12/20/88

Date Release Authorized: Dean N. Baker

Report Revised: 03/21/89 MAC: A

Dry weight extracted (gm): 30.00
Final Volume: 1.0 ml
Percent Moisture: NR
pH: NR
Conc/Dilution Factor: 1 to 1
Total Dilution: 1 to 2

Date Extracted: 12/29/88
Date Analyzed: 01/04/89
GPC Clean-up: YES (1 of 2)
Instrument ID: FINN IV

CAS Number		ug/Kg
108-95-2	Phenol	67 U
111-44-4	bis(2-Chloroethyl)Ether	67 U
95-57-8	2-Chlorophenol	67 U
541-73-1	1,3-Dichlorobenzene	67 U
106-46-7	1,4-Dichlorobenzene	67 U
100-51-6	Benzyl Alcohol	330 U
95-50-1	1,2-Dichlorobenzene	67 U
95-48-7	2-Methylphenol	67 U
39638-32-9	bis(2-chloroisopropyl)Ether	67 U
106-44-5	4-Methylphenol	67 U
621-64-7	N-Nitroso-Di-n-Propylamine	67 U
67-72-1	Hexachloroethane	130 U
98-95-3	Nitrobenzene	67 U
78-59-1	Isophorone	67 U
88-75-5	2-Nitrophenol	330 U
105-67-9	2,4-Dimethylphenol	130 U
65-85-0	Benzoic Acid	670 U
111-91-1	bis(2-Chloroethoxy)Methane	67 U
120-83-2	2,4-Dichlorophenol	200 U
120-82-1	1,2,4-Trichlorobenzene	67 U
91-20-3	Naphthalene	67 U
106-47-8	4-Chloroaniline	200 U
87-68-3	Hexachlorobutadiene	130 U
59-50-7	4-Chloro-3-Methylphenol	130 U
91-57-6	2-Methylnaphthalene	67 U
77-47-4	Hexachlorocyclopentadiene	330 U
88-06-2	2,4,6-Trichlorophenol	330 U
95-95-4	2,4,5-Trichlorophenol	330 U
91-58-7	2-Chloronaphthalene	67 U
88-74-4	2-Nitroaniline	330 U
131-11-3	Dimethyl Phthalate	67 U
208-96-8	Acenaphthylene	67 U
99-09-2	3-Nitroaniline	330 U

CAS Number		ug/Kg
83-32-9	Acenaphthene	67 U
51-28-5	2,4-Dinitrophenol	670 U
100-02-7	4-Nitrophenol	330 U
132-64-9	Dibenzofuran	67 U
121-14-2	2,4-Dinitrotoluene	330 U
606-20-2	2.6-Dinitrotoluene	330 U
84-66-2	Diethylphthalate	67 U
7005-72-3	4-Chlorophenyl-phenylether	67 U
86-73-7	Fluorene	67 U
100-01-6	4-Nitroaniline	330 U
534-52-1	4,6-Dinitro-2-Methylphenol	670 U
86-30-6	N-Nitrosodiphenylamine(1)	67 U
101-55-3	4-Bromophenyl-phenylether	67 U
118-74-1	Hexachlorobenzene	67 U
87-86-5	Pentachlorophenol	330 U
85-01-8	Phenanthrene	67 U
120-12-7	Anthracene	67 U
84-74-2	Di-n-Butylphthalate	67 U
206-44-0	Fluoranthene	67 U
129-00-0	Pyrene	67 U
85-68-7	Butylbenzylphthalate	67 U
91-94-1	3.3'-Dichlorobenzidine	330 U
56-55-3	Benzo(a)Anthracene	67 U
117-81-7	bis(2-Ethylhexyl)Phthalate	67 U
218-01-9	Chrysene	67 U
117-84-0	Di-n-Octyl Phthalate	67 U
205-99-2	Benzo(b)Fluoranthene	67 U
207-08-9	Benzo(k)Fluoranthene	67 U
50-32-8	Benzo(a)Pyrene	67 U
193-39-5	Indeno(1,2,3-cd)Pyrene	67 U
53-70-3	Dibenz(a,h)Anthracene	67 U
191-24-2	Benzo(ghi)Perylene	67 U

(1) Cannot be separated from diphenylamine

***Base/neutral surrogate recoveries**

d5-Nitrobenzene	96.3%
2-Fluorobiphenyl	91.5%
d14-p-Terphenyl	95.9%

***Acid surrogate recoveries**

d5-Phenol	92.3%
2-Fluorophenol	92.5%
2,4,6-Tribromophenol	82.6%